EXHIBIT N

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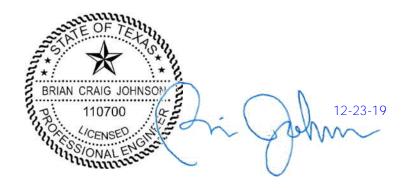
Storm Damage Report

for

Brabo International 11909 Auburn Road Laredo, TX 78045



Texas Certificate of Authority F-19508 Expires 31 March 2020



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Client: Lundquist Law Firm	Insurance Carrier: United Fire &
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Project Address:

Casualty Company

Brabo International
11909 Auburn Road
Policy #: 85318612
Claim #: 4220117295

Reported Date of Loss: May 21, 2017

Claim Type: Wind and Hail

Project Information

FIELD REPORT FOR INITIAL STORM DAMAGE INVESTIGATION

1.0 **Background Information:**

Forensic Building Science, Inc. (FBS) was contacted by the Lundquist Law Firm to provide an inspection of the exterior and interior of the above-mentioned property and to ascertain the extent of damage caused by wind and hail activity which was reported to have occurred on or around May 21, 2017. FBS retained the services of and worked in conjunction with Brian Johnson P.E.

Prior to inspection of the building FBS/Johnson reviewed the metallurgical testing and findings from Stolk Labs for this site location. Based on our inspection over 80% of the impact markings observed during our inspection had the same visual characteristics as the samples submitted to Stolk Labs prior to our inspection. Based on our on-site observations we did not cut additional holes in the roof assembly and conduct further metallurgical testing.

1.1

NOAA Storm Events Database – May 21, 2017: https://www.ncdc.noaa.gov/stormevents/eventdetails.jsp?id=698319

Event Details:

Event	Thunderstorm Wind
Magnitude	83 kts.
State	TEXAS
County/Area	WEBB
WFO	CRP
Report Source	NWS Storm Survey
NCEI Data Source	CSV
Begin Date	2017-05-21 15:28 CST-6
Begin Location	1S (LRD)LAREDO INTL ARP
Begin Lat/Lon	27.6004/-99.5173
End Date	2017-05-21 15:44 CST-6
End Location	2N LAREDO
End Lat/Lon	27.5742/-99.4725
Deaths Direct/Indirect	0/0 (fatality details below, when available)
Injuries Direct/Indirect	0/0
Property Damage	20.00M
Crop Damage	0.00K
Episode Narrative	Scattered thunderstorms developed over northeast Mexico during the afternoon of the 21st as an upper level disturbance moved across northern Mexico. An intense thunderstorm moved across the Rio Grande into the city of Laredo. Extensive wind damage occurred in the northern parts of Laredo from 80 to 95 mph wind gusts. Five homes were destroyed while around 50 single family and multi-family homes received major damage. Minor damage occurred to around

	150 single family and multi-family homes. Major damage occurred to five businesses. Hail from golf ball to baseball size inflicted damage to roofs and cars across the city. After heavy rainfall with this storm, a second storm early in the evening produced heavy rainfall that led to flash flooding in the city.
Event	Damage survey in connection with a severe thunderstorm revealed straight-line wind damage along a line around 5 miles in length and 1 mile in width across northwest Laredo. The damage was from west of the intersection of Interstate 69W and Mines Road to the intersection of east Del Mar Boulevard and McPherson Road. Damage was widespread through this area with numerous large tree limbs snapped, shingle damage to homes, dozens of utility poles bent or broken. The most significant damage occurred at the U.S. Customs facility near World Trade Bridge #3 and to homes in the Villas San Agustin neighborhood. At the U.S. Customs facility, several tractor trailers were overturned, and extensive damage occurred to the metal roof of this facility with several air conditioners blown off. Wind gusts were estimated to be between 80 and 95 mph. The World Trade Bridge was closed to commercial cargo traffic for nearly a week. Within the Villas San Agustin subdivision, 4 new homes that were under construction, slid off their foundations and collapsed. Debris from these properties impacted several nearby homes causing extensive damage. Numerous homes in this subdivision lost shingles. Laredo Fire Station #9, located near Interstate 69 and Mines Road, lost its metal roof. Farther southeast, in the Dominion Del Mar, Terra Hills, and Northview subdivisions, numerous large tree limbs were broken, utility poles were bent or broken and a cement wall under construction at the Laredo
Narrative	Fire Department was toppled.

1.2 **NOAA Severe Weather Inventory: Filtered Hail Signatures, May 21, 2017:** There were seven hail events near the property on this date. The image below shows 4.00-inch hail approximately 4-miles south/southwest of the property.



Note: Times are listed in Universal Time (UTC), which is 5 hours ahead of Central Time Zone (CDT).

1.3 NOAA Severe Weather Inventory: Digital Mesocyclone Detection, May 21, 2017:

There were five digital mesocyclones detected near the property on this date. The nearest was approximately 1 mile east of the property.

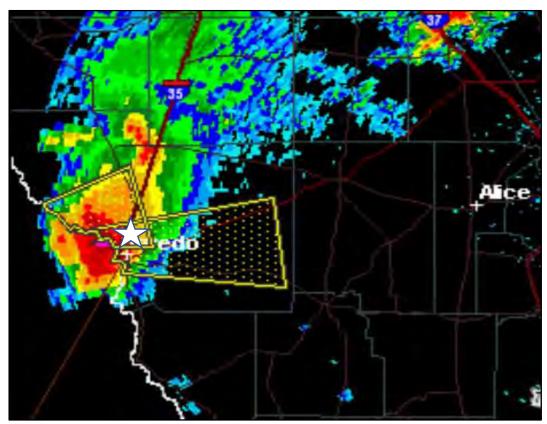


Note: Times are listed in Universal Time (UTC), which is 5 hours ahead of Central Daylight Time (CDT).

1.4 **WEATHER EVENT SUMMARY - Laredo, TX May 21, 2017:** http://www.interactivehailmaps.com/local-hail-map/laredo-tx/#prettyPhoto

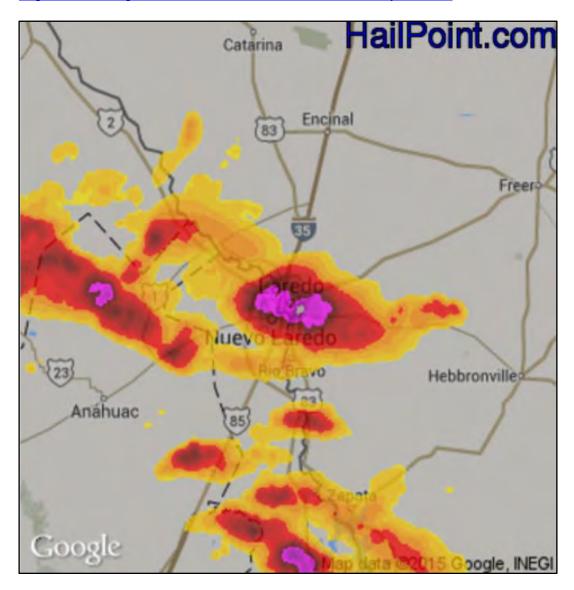
At 4:25 pm CDT, a severe thunderstorm was located over Laredo, moving east at 60 mph (radar indicated). Hazards include 60 mph wind gusts and half dollar size hail. Hail damage to vehicles is expected. Expect wind damage to roofs, siding, and trees.

At 4:28 pm CDT, a severe thunderstorm was located over doctor's hospital of Laredo, or over Laredo, moving east at 30 mph (radar indicated). Hazards include 60 mph wind gusts and half dollar size hail. Hail damage to vehicles is expected. expect wind damage to roofs, siding, and trees. Locations impacted include, Laredo, Laredo International Airport, Doctors Hospital of Laredo, Laredo Community College and Laredo Country Club.



White star indicates approximate location of the property.

1.5 **WEATHER EVENT SUMMARY - Laredo, TX May 21, 2017:** https://www.hailpoint.com/14093/details/Laredo--TX-May-21.html



1.6 News Reports for May 21, 2017 Laredo Storm Event:

- "The most compelling photos from this summer's massive Laredo thunderstorm" https://www.lmtonline.com/galleries/slideshow/Laredo-slammed-by-severe-thunderstorm-145556/photo-12954114.php
- Video of high winds in Laredo, TX May 21, 2017
 https://www.youtube.com/watch?v=12kVrUyW9Pw
- "Severe storm closes international border bridge in Laredo, US-Mexico" https://watchers.news/2017/05/22/nuevo-laredo-tornado-thunderstorm/
- "Laredo, TX Extreme Winds Flooding Damage 5/21/2017" https://www.youtube.com/watch?v=T4a5SzyzdQU

1.7 Satellite Image of the Property:



Google Earth imagery dated April 22, 2017 – before storm event



Google Earth imagery dated June 28, 2017 – after storm event

FBS personnel visited the site to take photos and to document damaged locations. These photos are included/attached and are considered part of this report.

1.8 The following claim related documents have been received:

- CC Consulting Group First Report FINAL, dated 11.30.2018
- BSC Forensic Engineer Metallurgical reports, dated 02.22.2019
- UFG Estimate for the amount \$2,325.22, dated 03.01.2019
- UFG Denial Letter, dated 03.14.2019
- Brabo Intl Repair Receipts & Invoices from October 2018 and July 2019 totaling \$5,515.00
- UFG Policy with issue date 06.30.2016 to 06.30.2017
- Stolk Labs Hail Damage Analysis Report, dated 08.08.2017
- UPC Damage Estimate with photos, dated 05.26.2018 for the amount \$305,394.89
- UPC Roof Leak Report, dated 08.13.2018
- UPC Storm Data & Analysis Report, dated 08.22.2018

1.9 The following additional documents were used for reference:

- According to the City of Laredo website, the they have adopted the following building codes:
 - o https://www.cityoflaredo.com/building/
 - o 2012 International Building Code
 - o 2012 International Existing Building Code
 - o 2012 International Fire Code
 - o 2012 International Mechanical Code
 - o 2012 International Plumbing Code
 - o 2012 International Fuel Gas Code
 - o 2015 International Energy Conservation Code
 - o 2011 National Electrical Code
- Photographs from site visits by FBS
- Haag Education Haag Certified Roof Inspector Program, Commercial Edition
- EPA: Moisture Control Guidance for Building Design Construction and Maintenance Dec 2013 P100HF07
- ASTM E2128-12 Standard Guide for Evaluating Water Leakage for Buildings
- ASHRAE R-Value Climate Zone Map
- ASTM E108-10a Standard Test Methods for Fire Tests of Roof Coverings
- American Society of Civil Engineers (ASCE) Standard, Guideline for Condition Assessment of the Building Envelope, SEI/ASCE 30-00, 2000.
- American Society of Civil Engineers "Guideline for the Structural Condition Assessment of Existing Buildings", ANSI/ASCE 11-90, ANSI Approved August 1991.
- American Society of Civil Engineers "Minimum Design Loads for Buildings and Other Structure", ANSI/ASCE 7-95, Approved June 1996, ASCE 7-05 and related Commentaries

- ASTM D7053 / D7053M 17 Standard Guide for Determining and Evaluating Causes of Water Leakage of Low-Sloped Roofs
- SPRI, Construction-Generated Moisture and Its Effect on Roofing Systems, August 2008
- AISC: "Steel Construction Manual" American Institute of Steel Construction
- AISI: "Cold Formed Steel Design Manual" American Iron and Steel Institute
- RS-738-Insulation Installation Instructions
- ASHRAE R-Value Climate Zone Map
- Code referenced standards: FM 4470, UL 1256, and CAN/ULC S126M
- Texas Board of Professional Engineers, Advisory Ruling October 7, 2004
 "Policy Advisory Opinion Regarding Structural or Mechanical Modifications to Building Roofs"
- ANSI/SPRI ES-1 Wind Design Standard for Edge Systems Used with Low Slope Roofing Systems. 1998, 2003, 2011. Code reference standard
- An Analysis of Wind Load Design Load Side. GAF Blog, by Jim Kirby
 November 30, 2017
- ASTM C1153 10(2015) Standard Practice for Location of Wet Insulation in Roofing Systems Using Infrared Imaging
- Metal vs. Mother Nature (hail) By: Jim Austin | March 13, 2013
- MCA Metal Roofing Installation Manual 2014.
- MCA Technical Bulletin: Static and Dynamic Analysis of Metal Roof Systems.
- MCA Technical Bulletin: Roof Covering Repair Requirements and the International Codes.
- "Sealing and Flashing Metal Roofs" Journal of Light Construction, Rob Haddock, January 2000.
- FEMA: Metal Roof Systems in High-Wind Regions
- Ice Ball Impact Testing of Siding, Haag Engineering: March 2012
- Specification Test Standard for Impact Resistance Testing of Rigid Roofing Material by Impacting with Freezer Ice Balls, FM4473. July 2005.
- Hail: Sizing It Up! By Vickie Crenshaw and Jim D. Koontz, Western Roofing May/June 2002.
- Galvalume Steel Roof Hail Damage: J.E.I. Metallurgical, Inc, R. Craig Jerner, Ph.D., P.E.
- United States Steel Technical Bulletin # TBP 2012.17: Hail Damage On Coated Sheet Steel Roofing
- ASTM E1514 98 Standard Specification for Structural Standing Seam Steel Roof Panel Systems.
- ASTM E573-01(2013) Standard Practies for Internal Reflection Spectroscopy.

2.0 Structure Information:



Google Earth imagery of terrain surrounding property dated April 22, 2017

2.1 Brabo International Building is located in a Commercial Business District. Representatives at the property noted the building was constructed by ownership around 2001, and the metal roof is original. The area surrounding the property is composed of large commercial warehousing and parking lots. Structures of similar height and construction lie to the north and east. To the south are buildings and a large open field, to the immediate west there is open land of concrete and low vegetation. Per ASCE 7-10, the terrain surrounding the building is best categorized as Surface Roughness C, leading to a Wind Exposure Category C designation, as defined in the ASCE-7, historically, at the time of loss, and currently.

26.7.2 Surface Roughness Categories

A ground Surface Roughness within each 45° sector shall be determined for a distance upwind of the site as defined in Section 26.7.3 from the categories defined in the following text, for the purpose of assigning an exposure category as defined in Section 26.7.3.

Surface Roughness B: Urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger.

Surface Roughness C: Open terrain with scattered obstructions having heights generally less than 30 ft (9.1 m). This category includes flat open country and grasslands.

Surface Roughness D: Flat, unobstructed areas and water surfaces. This category includes smooth mud flats, salt flats, and unbroken ice.

Source: ASCE 7-10

26.7.3 Exposure Categories

Exposure B: For buildings with a mean height of less than or equal to 30 ft (9.1 m), Exposure B shall apply where the ground surface roughness, as defined by Surface Roughness B, prevails in the upwind direction for a distance greater than 1,500 ft (457 m). For buildings with a mean roof height greater than 30 ft (9.1 m), Exposure B shall apply where Surface Roughness B prevails in the upwind direction for a distance greater than 2,600 ft (792 m) or 20 times the height of the building, whichever is greater.

Exposure C: Exposure C shall apply for all cases where Exposure B or D do not apply.

Exposure D: Exposure D shall apply where the ground surface roughness, as defined by Surface Roughness D, prevails in the upwind direction for a distance greater than 5,000 ft (1,524 m) or 20 times the building height, whichever is greater. Exposure D shall also apply where the ground surface roughness immediately upwind of the site is B or C, and the site is within 600 ft (183 m) or 20 times the building height, whichever is greater, from an Exposure D condition, as defined in the previous sentence.

Source: ASCE 7-10

- 2.2 Temporary repairs have been made after the storm and prior to our assessment, throughout the property. Many of these repairs were made at the expense of the owners. Temporary repairs to the property are as follows:
 - Water remediation
 - Roof repairs
 - Repair and replacement of interior water damage including painting

3.0 **Roof Observations:**

The standing seam metal roof showed impact damage throughout rooftop. Hail impacts were observed on parapet wall, air conditioning unit, and electrical equipment. Several other areas were also affected by wind damage which included panel shift and panel separation. Hail spatter marks and indentations were measured on the metal roofing with some demarcations measuring up to 1.50 inches. Impact damage was observed in total on the metal roofing consistent with up to 2.00" hail. These indentations restricted water flow and collected debris within the indents.

When the indentations caused by hail were cleaned of pollutants, close up photos showed striations consistent with permanent deformation (strain hardening) and damage to the galvalume coating and corrosion. Photos taken at non damaged areas did not have these same characteristics. This was consistent with testing performed by Stolk Labs.

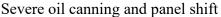
The roof assemblies on the buildings were fully assessed. Complete visual inspections were done, and a representative sample of various damage patterns were recorded. Damage on the roof was consistent with the storm event. The extent of damage varied as one would expect. See *Brabo Intl - 11909 Auburn - Roof Photo Log 10-14-19 SRD* for documented damages.

3.1 **Rooftop Damage:**

Damage to the roof related to hail, wind and rain includes, but may not be limited to, the following:

- Damage to parapet walls
- Damaged roof
- Cracks in the parapet wall
- Damage to air conditioning components
- Damaged by replacement of metal roof section
- Close up photos showed striations consistent with permanent deformation (strain hardening) and damage to the galvalume coating







Hail impact on roof parapet



Metal panel displaced



Impact damage to metal roof



Impact damage to roof



Impact damage to roof



Impact damage to roof



Impact damage to A/C condenser



Large spatter marks on electrical equipment



Replaced panel for testing



Damaged replaced panel



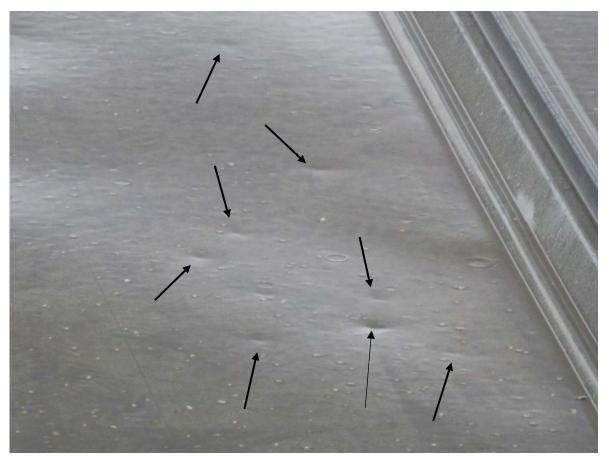
Damaged replaced panel



Damaged replaced panel



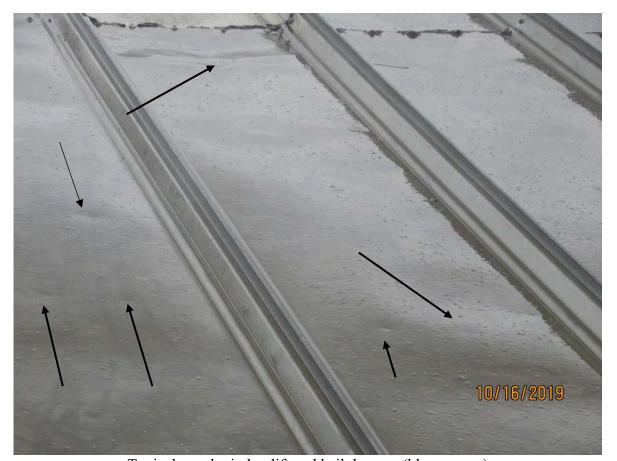
Replaced panel for testing



Typical hail damage



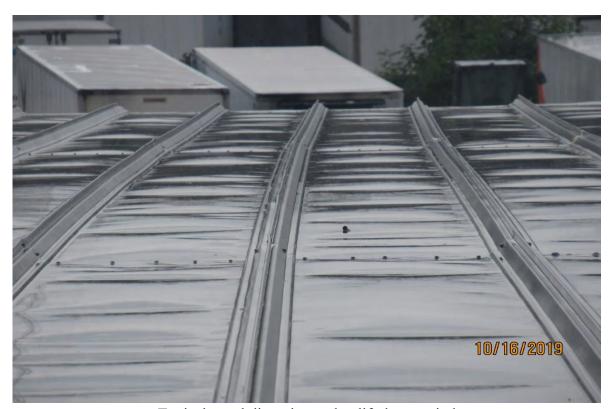
Large hail impact marks



Typical panel wind uplift and hail damage (blue arrows)



Typical panel distortion and wind uplift overview



Typical panel distortion and uplift due to wind



Panel distortion and bent fastener



Panel pulled apart at joint with uplift at fasteners



Hail damage and panel uplift

3.2 Infrared Scanning of Roof:

Infrared scanning was performed on the interior during FBS's site inspection. See *Brabo Intl - 11909 Auburn - Infra-Red Photo Log 10-14-19 KJS* for documented damages. The following observations were made:

- Anomalies at water damaged locations was observed
- Anomalies on the low slope roof were present



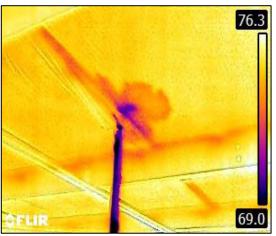
Underside of roof deck



IR anomaly of previous photo

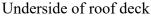


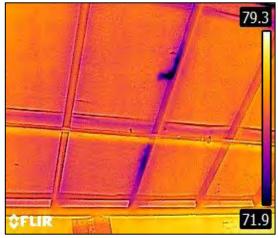
Underside of roof deck



IR anomaly of previous photo







IR anomaly of previous photo

Exterior Observations:

All accessible areas of the exterior were inspected. A representative number of damaged areas were photographed and documented. See *Brabo Intl - 11909 Auburn - Exterior Photo Log 10-14-19 GD* for documented damaged.

4.1 Exterior Façade Damage:

Damage to the exterior related to hail, wind and rain through wind-created openings includes, but may not be limited to, the following:

- Wall cracking
- Water damage to painted surfaces
- Cohesion failure
- Damage to windows



Overview of front elevation



Overview continued



Right elevation



Left elevation



Rear elevation



Rear elevation continued



Cohesion failure on wall



Separation of wall



Brabo International 11909 Auburn Road – Storm Damage Report Brian C. Johnson, P.E and Forensic Building Science, Inc.

Water damage to light and soffit

Crack in ceiling, see previous photo

5.0 <u>Interior Observations</u>:

The interior of the building was inspected. A representative number of damaged areas were photographed and documented. See *Brabo Intl - 11909 Auburn - Interior Photo Log 10-14-19 GD* and *Brabo Intl - 11909 Auburn - Interior Warehouse Photo Log 10-14-19 GD* for documented damages.

5.1 **Interior Damage:**

Damage to the interior related to the storm includes, but may not be limited to, the following:

- Water damage to painted gypsum board ceilings, walls, and areas around windows
- Water damage to suspended ceiling tiles
- Water damage to insulation below roof deck
- Water damage to painted surfaces



Overview of office area



Water damage to ceiling tiles



Overview of warehouse area



Water damage to insulation below roof deck



Water damage to ceiling



Displaced insulation on ceiling



Damaged ceiling insulation



Damaged insulation, exposed roof deck



Wall is displaced



Close-up of previous photo

5.2 Window Damage:

Windows consist of painted aluminum clad, and fixed picture type, typical in these types of structures. The pressures exerted on a building due to wind will be primarily perpendicular or out-of-plane to the walls and other surfaces. This means that the deflection and any displacement of the building components will generally be perpendicular, or out-of-plane to the walls as opposed to in-plane. Water leaks were reported to have occurred to the interior of the buildings in some areas at window locations.

We observed displacement of frame to frame butt joints at intersecting members, we also observed cohesion failure at the intersection of the window frame to rough opening intersections. In our opinion, this cohesion failure was consistent with the hurricane force wind damage during the storm. In other instances, there were clear signs of window frames that had been displaced from their original position. This was also consistent with damage caused by wind. In many cases, water damage was observed around windows throughout the interior.



Cohesion failure to window



Cohesion failure at window frame



Window frame is displaced



Window glazing is damaged



Window frame displacement



Window frame is displaced



Close-up of previous photo

6.0 Review of Stolk Labs Report

Prior to our inspection, the building owner had metallurgical testing done on hail damages samples taken from this roof assembly. In that report, Stolk reached the following conclusions:

Executive Summary:

"Physical damage sustained by metal roof panels in a hailstorm were investigated and the results presented in detail. Scientific evidence showed a significant loss of roof panel integrity in hailstone impact regions. Cross-sections through the impact craters revealed microcracking of the protective coating, loss of bonding to steel base metal, and corrosion cell development. All these laboratory-documented factors resulted in a direct loss of expected roof performance and lifespan. Because of the oxidized nature of the roof coating, re-coating is not possible and the affected roof panels should be replaced."

Conclusions:

Results of the roof inspections, panel sampling, laboratory testing, physical-chemical analyses, microscopic evaluation of the impact sites, and interpretation of the results led to the following:

- 1) The metallurgical bond between the protective aluminum roof coating and steel substrate had been permanently damaged at hailstone impact sites, which diminished the expected lifespan of the roof.
- 2) A corrosion-inhibiting barrier, passively formed as aluminum oxide, had been removed by the hailstone impact forces and exposed underlying coating to new corrosive attack.
- 3) Accelerated localized corrosion pitting due to hail-induced damage along with additional mechanical stress increased the corrosion rate in the damaged steel roof panels.
- 4) Hail-induced depressions had allowed accumulated moisture and corrosive elements thereby increasing surface and subsurface corrosion. Much pinpoint and crevice corrosion was observed at hail impact sites.
- 5) The presence of sulfur and chlorine ions in the hail depressions or craters had additionally accelerated corrosive attack of damaged hot-dipped aluminum layer.
- 6) Since the hailstorm event, the roof panels had randomly "lost" more than half of their protective coating thickness due to corrosion where hail struck.
- 7) Due to differential oxygen availability in hail impact sites and loss of lateral corrosion barrier protection, corrosion of the roof panels with hail damage will continue in the future and, therefore, the panels should be replaced before imminent deep steel corrosion and perforation.

7.0 <u>Causation Statement:</u>

At this location, consistent with industry methodology and published ASTM standards, we conducted a three-part inspection in this matter. The first part of all inspections consists of a detailed visual on-site analysis looking at the conditions on the site at the time of the inspection primarily focused on the exterior envelope including roof assemblies and foundations on the four sides of the building. The goal of the visual inspection is to look for anything indicative of this building changing from its original construction.

The second part of our inspection is the document review which includes analyzing the maintenance and service history when available, various damage patterns indicative of pre or post storm events and building blueprints when available. In addition, we interview tenants, building owners, and others who may have been there before and after the event occurred. The next phase is to conduct more detailed inspection which include quantification of damages (e.g. number of hail hits within a quantifiable area of a roof assembly and accounting for wind speeds), separating out pre-storm damage and other types of damage, including defects in design, improper installation or lack of maintenance. This condition assessment is essential in developing a damage causation theory and scope of repairs. In some instances, invasive inspections are performed. Ensuing damage to the interior elements was also documented. This damage is also segregated between damage that existed before the storm and new damage that has occurred as a result of the storm.

- 7.1 Based upon our review of the documents submitted to us for review prior and after our inspection and on-site inspection, and the observations collected by FBS from the property during our inspection, we have concluded that the roof assembly and some interior finishes were damaged by hail, wind and rain through wind-created openings on May 21, 2017. All damaged materials must be replaced.
- 7.2 Based upon our training, education, experience, the information gathered during our inspections, the testing performed by Stolk Labs and upon a reasonable degree of building science and engineering certainty, it is more likely than not that the observed damage is a result of the subject storm event. On the reported date of loss, there was sufficient wind, rain and hail to cause the above-referenced damage.
- 7.3 Based on our interior inspection of the buildings and the information provided to FBS regarding when the leaking began in relation to the date of loss, including the location of these leaks, we have concluded that it is more likely than not, that the wind and ensuing water damage we observed was a result of the above referenced storm event. FBS was on site when the area was experiencing light rain—as such, we were able to independently correlate and validate the location of several of the leaks (previously identified by UPC and the on-site personnel in the Roof Leak Report) as the same general location of leaks which occurred for the first time after May 2017.
- 7.4 Based on the on-site data and measurement of impact marks, 1.25 to 2.00-inch hail from the storm event fell at this location and was of sufficient size and density to damage the roof metals.
- 7.5 In addition, winds reported by numerous sources as high as 90 miles per hour caused noticeable roof panel uplift, panel separation, permanent panel distortion, compression and bending of fasteners, and storm created openings at seams. While damage from the hail was sufficient to warrant replacement of the roof assembly, damage from the wind was also sufficient to require full replacement. In our opinion, interior water damage resulted from the wind damaged panels and not from

- the hail damage. Failure to completely remove and replace the damaged assemblies at the property will result in additional damage to the interior due to water intrusion.
- 7.6 Damage to the galvanized panels identified by Stolk utilizing *Visual Examination*& *Photo Documentation*, Stereomicroscopy, FTIR Analysis, Scanning Electron Microscopy & Metallography, and EDX Composition Analyses concluded that the samples submitted were damaged by hail and damaged panels should be replaced due to loss of life expetency.
- 7.7 FBS/Johnson also performed <u>Visual Examination & Photo Documentation</u> and identified "impact markings" from hail consistent with the "impact damage" identified by Stolk Labs in its testing. These impact locations covered over 80% of the roof panel surfaces. Based on our findings entire replacement of the roof assembly is required.

8.0 <u>Conclusions</u>:

- 8.1 Hail and wind caused damage to the roof system and exterior on May 21, 2017. According to our review of NOAA reports, hail between 1.00" and 4.00" in size fell within the vicinity of the property. Since the May 21, 2017 storm, multiple locations in the building are reported to leak after rain events. FBS witnessed this leaking during its inspection. In our opinion, full replacement of the roof system, metal flashings, siding, gutters and downspouts will be required.
- 8.2 Damage to the metal roof panels from hail covered 80% of the overall roof area. The indentations were consistent with damaged samples from the same roof submitted to and tested by Stolk Labs. Stolk concluded these impact locations were damaged:
 - 1) The metallurgical bond between the protective aluminum roof coating and steel substrate had <u>been permanently damaged at hailstone impact sites</u>, which diminished the expected lifespan of the roof.
 - 2) A corrosion-inhibiting barrier, passively formed as aluminum oxide, had been removed by the hailstone impact forces and <u>exposed underlying coating to new corrosive attack.</u>
 - 3) Accelerated localized corrosion pitting due to hail-induced damage along with additional mechanical stress <u>increased the corrosion rate</u> in the damaged steel roof panels.
 - 4) Hail-induced depressions had allowed accumulated moisture and corrosive elements thereby increasing surface and subsurface corrosion. Much <u>pinpoint</u> and crevice corrosion was observed at hail impact sites.
 - 5) The presence of sulfur and chlorine ions in the hail depressions or craters had additionally accelerated corrosive attack of damaged hot-dipped aluminum layer.

- 6) Since the hailstorm event, the roof panels had randomly "lost" more than half of their protective coating thickness due to corrosion where hail struck.
- 7) Due to differential oxygen availability in hail impact sites and loss of lateral corrosion barrier protection, <u>corrosion of the roof panels with hail damage will continue in the future</u> and, therefore, <u>the panels should be replaced</u> before imminent deep steel corrosion and perforation.
- 8.1 Damage to these metal roof panels from hail created a variety of indentations that continue to collect debris, sediment and water. According to the MCA Roofing Installation Manual Circa 2014, among other sources cited above, even small amounts of trapped water can cause premature corrosion to occur at the impact locations:

("Corrosion is the process in which a solid, especially a metal, degrades and changes by a chemical action. For example, oxidation of iron in the presence of water by an electrolytic process is a form of corrosion. It forms iron oxide or rust. Oxidation requires both moisture and air in order to occur...Oxidation can occur very rapidly when excess water remains on a metal surface."). e.g. For example, when indentations made by hail slows water run off at the indentation location allowing for pollutants to collect.

Indentations are less ductile (and more prone to puncture from future hail and normal weathering effects) than the metal prior to hail impact as the areas are permanently deformed by stressing the metal into the strain-hardening region. These indentations are not expected to diminish with time.

8.2 Damage caused by wind included metal crimping, uplift, permanent panel distortion, seam separation, and storm created openings in the roof assembly. Damage from wind requires full replacement of the roof panels. Based on similar projects, the age and condition of the panels, surgical repairs to individual panels will likely damage surrounding panels and any underdeck insulation. Any damage to structural elements (roof deck, clips, fasteners, purlins) will require sealed details from a licensed civil or structural engineer before reuse.

9.0 <u>Code Discussion</u>:

9.1 **2015 IECC (International Energy Conservation Code) Definitions**ROOF ASSEMBLY: "A system designed to provide weather protection and resistance to design loads. The system consists of a roof covering and roof deck or a single component serving as both the roof covering and the roof deck. A roof assembly includes the roof covering, underlayment, roof deck, insulation, vapor retarder and <u>interior finish</u>."

The key component here is that the energy code includes the "interior finish". Because the roof membrane in this case creates the vapor and air barrier above the

conditioned space all water damaged elements in the assembly must be replaced. Including roof deck insulation.

Interior Finish is defined as:

INTERIOR FINISH: "Interior finish includes interior wall and ceiling finish and interior floor finish."

Interior wall and Ceiling Finish is defined as:

INTERIOR WALL AND CEILING FINISH: "The exposed interior surfaces of buildings, including but not limited to: fixed or movable walls and partitions; toilet room privacy partitions; columns; ceilings; and interior wainscoting, paneling or other finish applied structurally or for decoration, acoustical correction, surface insulation, structural fire resistance or similar purposes, but not including trim."

If water damage has occurred to the interior finish, for example the ceiling tiles (which are for decoration, acoustical corrections and provide fire resistance) which require replacement, then the remaining parts of the roof assembly up to the roof covering (working inside out) must also be examined and likely replaced. Coring will typically reveal either presence of water or signs that water did enter. Most of, if not all of the products used in the "roof assembly" are not intended by the manufacturer to get wet and water damage can be identified. In this case, the water damage has occurred requiring replacement of the roof assembly insulation and the roof covering in order to access this insulation.

9.2 The 2012 IBC (International Building Code):

The following provision in the code regarding roof recovering is applicable to this property:

1511.3.1.1 Exceptions. A *roof recover* shall not be permitted where any of the following conditions occur:

- Where the existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
- Where the existing roof covering is slate, clay, cement or asbestos-cement tile.
- Where the existing roof has two or more applications of any type of roof covering.

9.3 The 2012 IEBC (International Existing Building Code):

The following provision in the code regarding roof recovering is applicable to this property:

[BS] 705.3 Roof replacement

Roof replacement shall include the removal of all existing layers of roof coverings down to the roof deck.

Exception: Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in

accordance with Section 1507 of the International Building Code.

[BS] 705.3.1 Roof recover

The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:

- 1. The new roof covering is installed in accordance with the roof covering manufacturer's approved instructions.
- Complete and separate roofing systems, such as standing-seam metal roof panel systems, that are designed to transmit the roof loads directly to the building's structural system and that do not rely on existing roofs and roof coverings for support, are installed.
- 3. Metal panel, metal shingle and concrete and clay tile roof coverings are installed over existing wood shake roofs in accordance with Section 705.4.
- 4. A new protective *roof coating* is applied over an existing protective *roof coating*, a metal roof panel, metal roof shingles, mineral-surfaced roll roofing, a built-up roof, modified bitumen roofing, thermoset and thermoplastic single-ply roofing or a spray polyurethane foam roofing system.

[BS] 705.3.1.1 Exceptions

A roof recover shall not be permitted where any of the following conditions occur:

- 1. The existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
- 2. The existing roof covering is slate, clay, cement or asbestoscement tile.
- 3. The existing roof has two or more applications of any type of roof covering.

10.0 Requirements / Recommendations:

Based on the findings during the investigation, we recommend the following steps be taken:

- 1. Follow all applicable building codes.
- 2. Remove all existing roofing materials down to the roof purlins.
- 3. Remove all insulation which will be damaged during reroofing.
- 4. Replace all roofing materials, cap flashings and appurtenances with new. Include adding additional insulation to meet current Energy Codes.

NOTE: THIS WILL REQUIRE INSTALLATION OF STANCHIONS ONTO PURLINS TO ALLOW FOR 3" FOAM INSULATION TO MEET ENERGY

CODES. THIS WILL REQUIRE ADDITIONAL ENGINEERING DESIGN FEES TO RETROFIT THE STRUCTURE FOR WIND LOAD.

- 5. Alternate construction techniques may be acceptable provided a licensed design professional approves and signs and stamps plans and or shop drawings for these repairs. Means and methods are the contractor's responsibility.
- 6. Conform to any special inspection and testing schedules issued by the engineer.
- 7. Contractor is solely responsible for adherence to all applicable safety requirements for work at heights.
- 8. Contractor shall remain on alert for signs of mold during repairs and construction.
- 9. Energy code requirements have not been reviewed. Scope of work for this project is structural only. Integration of existing building systems with vapor retarders, application of sealants, flashing and other items are the responsibility of the contractor.
- 10. Stability during construction is the responsibility of the Contractor. Structure as detailed is intended to be stable once all sheathing and fasteners are in place.
- 11. Remove water damaged interior materials and effect repairs pursuant to current published guidelines by ANSI/IICRC S500 "Water Damage Restoration." This will include interior environmental controls.

11.0 <u>Authors Statement</u>:

This report is jointly authored by Brian Craig Johnson, P.E, and Jeremy Lansdown and Tom Irmiter, of Forensic Building Science, Inc. All three have reviewed each other's contributions to this report and concur with the overall content of the report.

- 11.1 Jeremy Lansdown contributed to the background information and oversaw site investigations. In addition, he assisted in compiling the estimate.
- 11.2 Brian Craig Johnson contributed to the Causation and Engineering analysis and failure mechanisms to the structure as a direct result the storm and evaluated repairability issues.
- 11.3 Tom Irmiter drafted the report and contributed to the weather data, the documents section, the Causation analysis, code review and damage model with estimated costs to restore the building to a preloss condition.

Discovery is ongoing. Additional testing and inspections may need to be performed and additional and/or supplemental information and opinions may be contained in future reports issued by Forensic Building Science, Inc. This report is the exclusive property of the client noted previously and cannot be relied upon by a third party. Copies of this report are released to third parties only by written permission of the client.

Please contact our office should you have any questions or need additional information.

Respectfully submitted,

	12-23-19
Jeremy Lansdown	Date

Project Manager, Forensic Building Science, Inc.

Tom Irmiter, President, Forensic Building Science, Inc.

Date

Building Causation, Code and Damages Consultant



Insured: Brabo International - 11909 Auburn Rd.

Property: 11909 Auburn Rd.

Laredo, TX 78045

Estimator: Tom Irmiter

Claim Number: Type of Loss: Wind/Hail

Date of Loss: 5/21/2017 12:00 AM Date Received:

Date Inspected: 10/16/2019 12:00 AM Date Entered: 11/12/2019 9:24 AM

Price List: TXCC8X_NOV19

Restoration/Service/Remodel

Estimate: BRABOINTERNATIONAL

OPENING STATEMENT:

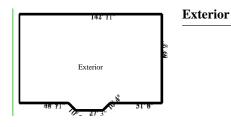
OPCC (OPINION OF PROBABLE CONSTRUCTION COST)

1). This Estimate is predicated on the quantity survey which precedes herewith. The survey is subject to mechanical and human error. This estimate is now, therefore subject to revision contingent on the discovery of mechanical and / or human error.



BRABOINTERNATIONAL

Exterior



7469.04 SF Walls 20273.39 SF Walls & Ceiling 1422.71 SY Flooring 466.81 LF Ceil. Perimeter

12804.36 SF Ceiling 12804.36 SF Floor 466.81 LF Floor Perimeter

Height: 16'

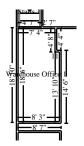
DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
1. Clean with pressure/chemical spray	7,469.04 SF	0.32	191.65	479.00	3,060.74	(0.00)	3,060.74
2. Stucco patch / small repair - ready for color	128.00 EA	166.44	139.94	4,288.84	25,733.10	(0.00)	25,733.10
Allowance to repair damaged stucco							
3. Seal & paint stucco	7,469.04 SF	1.16	121.37	1,757.10	10,542.56	(0.00)	10,542.56
Allowance to paint stucco repair areas an	d tilt wall						
DOORS & WIN	DOWS						
4. R&R Storefront door - alum. anodized frame, 3'x7' -Double pane	1.00 EA	1,947.19	114.20	412.28	2,473.67	(0.00)	2,473.67
5. R&R Storefront - aluminum anodized frame - Double pane	588.00 SF	26.58	703.25	3,266.48	19,598.77	(0.00)	19,598.77
Totals: Exterior			1,270.41	10,203.70	61,408.84	0.00	61,408.84
Total: Exterior			1,270.41	10,203.70	61,408.84	0.00	61,408.84

Interior

Interior

DESCRIPTION	QUANTITY U	NIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
6. R&R Vinyl-faced/laminated insulation - 3"		0.96	410.58	2,507.72	15,046.29	(0.00)	15,046.29
Total: Interior			410.58	2,507.72	15,046.29	0.00	15,046.29





Warehouse Office 1 Height: 8'

404.48 SF Walls 552.49 SF Walls & Ceiling 16.45 SY Flooring 53.46 LF Ceil. Perimeter 148.01 SF Ceiling 148.01 SF Floor

53.46 LF Floor Perimeter

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
7. R&R Suspended ceiling system - 2' x 4' ELECTRICAL	148.01 SF	4.03	14.82	122.26	733.56	(0.00)	733.56
8. R&R Fluorescent - acoustic grid fixture four tube, 2'x 4'	2.00 EA	221.48	9.16	90.42	542.54	(0.00)	542.54
9. R&R Ceiling diffuser - square, lay-in - 24"	1.00 EA	110.07	4.35	22.90	137.32	(0.00)	137.32
Totals: Warehouse Office 1	·	·	28.33	235.58	1.413.42	0.00	1.413.42



Warehouse Office 2 Height: 8'

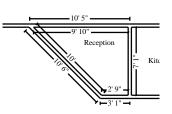
316.70 SF Walls411.97 SF Walls & Ceiling10.59 SY Flooring39.59 LF Ceil. Perimeter

95.27 SF Ceiling 95.27 SF Floor

39.59 LF Floor Perimeter

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
10. R&R Suspended ceiling system - 2' x 4'	95.27 SF	4.03	9.54	78.70	472.18	(0.00)	472.18
ELECTRICAL							
11. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	2.00 EA	221.48	9.16	90.42	542.54	(0.00)	542.54
HVAC - ACCESSORIES							
12. R&R Ceiling diffuser - square, lay-in - 24"	1.00 EA	110.07	4.35	22.90	137.32	(0.00)	137.32
Totals: Warehouse Office 2			23.05	192.02	1,152.04	0.00	1,152.04





Reception Height: 9'

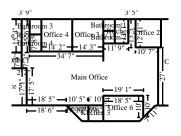
267.64 SF Walls 312.40 SF Walls & Ceiling 4.97 SY Flooring

29.74 LF Ceil. Perimeter

44.75 SF Ceiling 44.75 SF Floor

29.74 LF Floor Perimeter

DESCRIPTION	QUANTITY U	JNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
13. R&R Suspended ceiling system - 2' x 4'	44.75 SF	4.03	4.48	36.96	221.79	(0.00)	221.79
ELECTRICAL							
14. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	2.00 EA	221.48	9.16	90.42	542.54	(0.00)	542.54
HVAC - ACCESSORIES							
15. R&R Ceiling diffuser - square, lay-in - 24"	1.00 EA	110.07	4.35	22.90	137.32	(0.00)	137.32
Totals: Reception			17.99	150.28	901.65	0.00	901.65

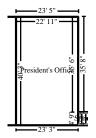


Main Office Height: 9'

2375.25 SF Walls 4017.81 SF Walls & Ceiling 182.51 SY Flooring 263.92 LF Ceil. Perimeter 1642.55 SF Ceiling 1642.55 SF Floor 263.92 LF Floor Perimeter

DESCRIPTION	QUANTITY U	NIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
16. R&R Suspended ceiling system - 2' x 4'	1,642.55 SF	4.03	164.42	1,356.78	8,140.68	(0.00)	8,140.68
ELECTRICAL							
17. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	22.00 EA	221.48	100.79	994.66	5,968.01	(0.00)	5,968.01
HVAC - ACCESSORIES							
18. R&R Ceiling diffuser - square, lay-in - 24"	13.00 EA	110.07	56.57	297.52	1,785.00	(0.00)	1,785.00
Totals: Main Office			321.78	2,648.96	15,893.69	0.00	15,893.69

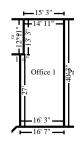




President's Office Height: 9'

1109.33 SF Walls 2032.14 SF Walls & Ceiling 102.53 SY Flooring 126.36 LF Ceil. Perimeter 922.81 SF Ceiling922.81 SF Floor126.36 LF Floor Perimeter

DESCRIPTION QUANTITY UNIT PRICE TAX O&P **RCV** DEPREC. ACV ----- CEILINGS-----19. R&R Suspended ceiling system - 2' x 4.03 92.37 762.26 (0.00)922.81 SF 4,573.55 4,573.55 ----- ELECTRICAL -----20. R&R Fluorescent - acoustic grid $8.00\,\mathrm{EA}$ 221.48 36.65 361.72 2,170.21 (0.00)2,170.21 fixture - four tube, 2'x 4' ----- HVAC - ACCESSORIES -----21. R&R Ceiling diffuser - square, lay-in - $3.00\,\mathrm{EA}$ 110.07 13.06 68.68411.95 (0.00)411.95 24" **Totals: President's Office** 142.08 1,192.66 7,155.71 0.00 7,155.71



Office 1 Height: 9'

1017.17 SF Walls 1653.46 SF Walls & Ceiling 70.70 SY Flooring 113.02 LF Ceil. Perimeter 636.29 SF Ceiling 636.29 SF Floor 113.02 LF Floor Perimeter

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
22. R&R Suspended ceiling system - 2' x 4'	636.29 SF	4.03	63.69	525.60	3,153.54	(0.00)	3,153.54
ELECTRICAL							
23. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	4.00 EA	221.48	18.32	180.84	1,085.08	(0.00)	1,085.08
HVAC - ACCESSORIES							
24. R&R Ceiling diffuser - square, lay-in - 24"	2.00 EA	110.07	8.70	45.76	274.60	(0.00)	274.60
Totals: Office 1			90.71	752.20	4,513.22	0.00	4,513.22





Office 2 Height: 9'

441.56 SF Walls 591.56 SF Walls & Ceiling 16.67 SY Flooring

49.06 LF Ceil. Perimeter

150.00 SF Ceiling 150.00 SF Floor

49.06 LF Floor Perimeter

DESCRIPTION	QUANTITY U	NIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
25. R&R Suspended ceiling system - 2' x 4'	150.00 SF	4.03	15.02	123.90	743.42	(0.00)	743.42
ELECTRICAL							
26. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	4.00 EA	221.48	18.32	180.84	1,085.08	(0.00)	1,085.08
HVAC - ACCESSORIES							
27. R&R Ceiling diffuser - square, lay-in - 24"	2.00 EA	110.07	8.70	45.76	274.60	(0.00)	274.60
Totals: Office 2			42.04	350.50	2.103.10	0.00	2,103,10



Office 3 Height: 9'

524.17 SF Walls736.08 SF Walls & Ceiling23.55 SY Flooring

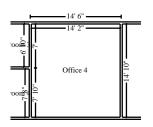
58.24 LF Ceil. Perimeter

211.91 SF Ceiling 211.91 SF Floor

58.24 LF Floor Perimeter

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
28. R&R Suspended ceiling system - 2' x 4'	211.91 SF	4.03	21.21	175.04	1,050.24	(0.00)	1,050.24
ELECTRICAL							
29. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	6.00 EA	221.48	27.49	271.28	1,627.65	(0.00)	1,627.65
HVAC - ACCESSORIES							
30. R&R Ceiling diffuser - square, lay-in - 24"	3.00 EA	110.07	13.06	68.68	411.95	(0.00)	411.95
Totals: Office 3	·	·	61.76	515.00	3,089,84	0.00	3.089.84





Office 4 Height: 9'

522.59 SF Walls 733.20 SF Walls & Ceiling 23.40 SY Flooring 58.07 LF Ceil. Perimeter 210.60 SF Ceiling 210.60 SF Floor 58.07 LF Floor Perimeter

DESCRIPTION QUANTITY UNIT PRICE TAX O&P **RCV** DEPREC. ACV ----- CEILINGS-----31. R&R Suspended ceiling system - 2' x 210.60 SF 4.03 21.08 173.96 1,043.76 (0.00)1,043.76 ----- ELECTRICAL -----32. R&R Fluorescent - acoustic grid 6.00 EA 221.48 27.49 271.28 1,627.65 (0.00)1,627.65 fixture - four tube, 2'x 4' ----- HVAC - ACCESSORIES -----33. R&R Ceiling diffuser - square, lay-in - $2.00\,\mathrm{EA}$ 110.07 8.70 45.76 274.60 (0.00)274.60 24" **Totals: Office 4** 57.27 491.00 2,946.01 0.00 2,946.01

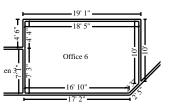


Office 5 Height: 9'

574.75 SF Walls 828.41 SF Walls & Ceiling 28.18 SY Flooring 63.86 LF Ceil. Perimeter 253.65 SF Ceiling 253.65 SF Floor 63.86 LF Floor Perimeter

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
34. R&R Suspended ceiling system - 2' x 4'	253.65 SF	4.03	25.39	209.52	1,257.12	(0.00)	1,257.12
ELECTRICAL							
35. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	7.00 EA	221.48	32.07	316.50	1,898.93	(0.00)	1,898.93
HVAC - ACCESSORIES							
36. R&R Ceiling diffuser - square, lay-in - 24"	3.00 EA	110.07	13.06	68.68	411.95	(0.00)	411.95
Totals: Office 5			70.52	594.70	3,568.00	0.00	3,568.00





Office 6 Height: 9'

532.11 SF Walls 744.59 SF Walls & Ceiling

23.61 SY Flooring

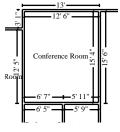
59.12 LF Ceil. Perimeter

59.12 LF Floor Perimeter

212.48 SF Ceiling

212.48 SF Floor

DESCRIPTION	QUANTITY U	NIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
37. R&R Suspended ceiling system - 2' x 4'	212.48 SF	4.03	21.27	175.52	1,053.08	(0.00)	1,053.08
ELECTRICAL							
38. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	6.00 EA	221.48	27.49	271.28	1,627.65	(0.00)	1,627.65
HVAC - ACCESSORIES							
39. R&R Ceiling diffuser - square, lay-in - 24"	4.00 EA	110.07	17.41	91.54	549.23	(0.00)	549.23
Totals: Office 6			66.17	538.34	3,229,96	0.00	3,229.96



Conference Room Height: 9'

501.42 SF Walls

693.42 SF Walls & Ceiling

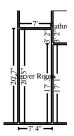
21.33 SY Flooring

55.71 LF Ceil. Perimeter

192.00 SF Ceiling192.00 SF Floor55.71 LF Floor Perimeter

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
40. R&R Suspended ceiling system - 2' x 4'	192.00 SF	4.03	19.22	158.60	951.58	(0.00)	951.58
ELECTRICAL							
41. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	12.00 EA	221.48	54.97	542.54	3,255.27	(0.00)	3,255.27
HVAC - ACCESSORIES							
42. R&R Ceiling diffuser - square, lay-in - 24"	5.00 EA	110.07	21.76	114.44	686.55	(0.00)	686.55
Totals: Conference Room			95.95	815.58	4,893.40	0.00	4,893.40





Server Room Height: 9'

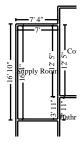
493.73 SF Walls 636.92 SF Walls & Ceiling 15.91 SY Flooring

54.86 LF Ceil. Perimeter

143.19 SF Ceiling 143.19 SF Floor

54.86 LF Floor Perimeter

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
43. R&R Suspended ceiling system - 2' x 4'	143.19 SF	4.03	14.33	118.28	709.67	(0.00)	709.67
ELECTRICAL							
44. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	6.00 EA	221.48	27.49	271.28	1,627.65	(0.00)	1,627.65
HVAC - ACCESSORIES							
45. R&R Ceiling diffuser - square, lay-in - 24"	4.00 EA	110.07	17.41	91.54	549.23	(0.00)	549.23
Totals: Server Room			59.23	481.10	2,886.55	0.00	2,886.55

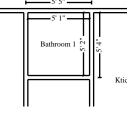


Supply Room Height: 9'

420.09 SF Walls 534.59 SF Walls & Ceiling 12.72 SY Flooring 46.68 LF Ceil. Perimeter 114.50 SF Ceiling114.50 SF Floor46.68 LF Floor Perimeter

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
46. R&R Suspended ceiling system - 2' x 4'	114.50 SF	4.03	11.46	94.60	567.50	(0.00)	567.50
ELECTRICAL							
47. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	6.00 EA	221.48	27.49	271.28	1,627.65	(0.00)	1,627.65
HVAC - ACCESSORIES							
48. R&R Ceiling diffuser - square, lay-in - 24"	3.00 EA	110.07	13.06	68.68	411.95	(0.00)	411.95
Totals: Supply Room	<u> </u>		52.01	434.56	2,607.10	0.00	2,607.10





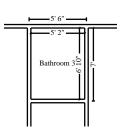
210.90 SF Walls & Ceiling 2.92 SY Flooring 20.51 LF Ceil. Perimeter

26.29 SF Floor20.51 LF Floor Perimeter

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
49. R&R Suspended ceiling system - 2' x 4'	26.29 SF	4.03	2.63	21.72	130.30	(0.00)	130.30
ELECTRICAL							
50. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	2.00 EA	221.48	9.16	90.42	542.54	(0.00)	542.54
HVAC - ACCESSORIES							
51. R&R Ceiling diffuser - square, lay-in - 24"	1.00 EA	110.07	4.35	22.90	137.32	(0.00)	137.32
Totals: Bathroom 1			16.14	135.04	810.16	0.00	810.16

DESCRIPTION	QUANTITY UN	NIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
52. R&R Suspended ceiling system - 2' x 4'	28.37 SF	4.03	2.84	23.42	140.59	(0.00)	140.59
ELECTRICAL							
53. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	2.00 EA	221.48	9.16	90.42	542.54	(0.00)	542.54
HVAC - ACCESSORIES							
54. R&R Ceiling diffuser - square, lay-in - 24"	1.00 EA	110.07	4.35	22.90	137.32	(0.00)	137.32
Totals: Bathroom 2			16.35	136.74	820.45	0.00	820.45





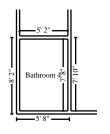
Bathroom 3 Height: 9'

216.19 SF Walls251.55 SF Walls & Ceiling3.93 SY Flooring24.02 LF Ceil. Perimeter

35.36 SF Floor 24.02 LF Floor Perimeter

35.36 SF Ceiling

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
55. R&R Suspended ceiling system - 2' x 4'	35.36 SF	4.03	3.54	29.20	175.24	(0.00)	175.24
ELECTRICAL							
56. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	2.00 EA	221.48	9.16	90.42	542.54	(0.00)	542.54
HVAC - ACCESSORIES							
57. R&R Ceiling diffuser - square, lay-in - 24"	1.00 EA	110.07	4.35	22.90	137.32	(0.00)	137.32
Totals: Bathroom 3			17.05	142.52	855.10	0.00	855.10



Bathroom 4 Height: 9'

231.54 SF Walls 271.32 SF Walls & Ceiling 4.42 SY Flooring

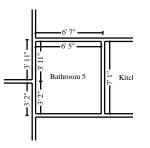
25.73 LF Ceil. Perimeter

39.77 SF Ceiling 39.77 SF Floor

25.73 LF Floor Perimeter

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
58. R&R Suspended ceiling system - 2' x 4'	39.77 SF	4.03	3.98	32.84	197.09	(0.00)	197.09
ELECTRICAL							
59. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	2.00 EA	221.48	9.16	90.42	542.54	(0.00)	542.54
HVAC - ACCESSORIES							
60. R&R Ceiling diffuser - square, lay-in - 24"	1.00 EA	110.07	4.35	22.90	137.32	(0.00)	137.32
Totals: Bathroom 4			17.49	146.16	876.95	0.00	876.95





Bathroom 5 Height: 9'

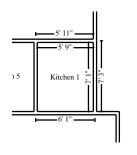
243.35 SF Walls288.94 SF Walls & Ceiling5.07 SY Flooring

27.04 LF Ceil. Perimeter

45.59 SF Ceiling 45.59 SF Floor

27.04 LF Floor Perimeter

DESCRIPTION	QUANTITY U	NIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
61. R&R Suspended ceiling system - 2' x 4'	45.59 SF	4.03	4.56	37.68	225.97	(0.00)	225.97
ELECTRICAL							
62. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	2.00 EA	221.48	9.16	90.42	542.54	(0.00)	542.54
HVAC - ACCESSORIES							
63. R&R Ceiling diffuser - square, lay-in - 24"	1.00 EA	110.07	4.35	22.90	137.32	(0.00)	137.32
Totals: Bathroom 5			18.07	151.00	905.83	0.00	905.83



Kitchen 1 Height: 9'

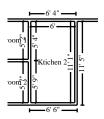
231.07 SF Walls 271.82 SF Walls & Ceiling

4.53 SY Flooring25.67 LF Ceil. Perimeter

40.75 SF Ceiling 40.75 SF Floor 25.67 LF Floor Perimeter

DESCRIPTION QUANTITY UNIT PRICE TAXO&P **RCV** DEPREC. ACV ----- CEILINGS-----64. R&R Suspended ceiling system - 2' x (0.00)40.75 SF 4.03 4.08 33.66 201.97 201.97 ----- ELECTRICAL -----65. R&R Fluorescent - acoustic grid 2.00 EA 221.48 9.16 90.42 542.54 (0.00)542.54 fixture - four tube, 2'x 4' ----- HVAC - ACCESSORIES -----66. R&R Ceiling diffuser - square, lay-in -1.00 EA 110.07 4.35 22.90 137.32 (0.00)137.32 24" Totals: Kitchen 1 17.59 146.98 881.83 0.00 881.83



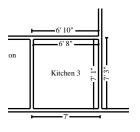


Ktichen 2 Height: 9'

307.65 SF Walls 374.20 SF Walls & Ceiling 7.39 SY Flooring 34.18 LF Ceil. Perimeter 66.55 SF Ceiling 66.55 SF Floor

34.18 LF Floor Perimeter

DESCRIPTION	QUANTITY U	NIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
67. R&R Suspended ceiling system - 2' x 4'	66.55 SF	4.03	6.66	54.98	329.84	(0.00)	329.84
ELECTRICAL							
68. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	2.00 EA	221.48	9.16	90.42	542.54	(0.00)	542.54
HVAC - ACCESSORIES							
69. R&R Ceiling diffuser - square, lay-in - 24"	1.00 EA	110.07	4.35	22.90	137.32	(0.00)	137.32
Totals: Ktichen 2			20.17	168.30	1.009.70	0.00	1.009.70



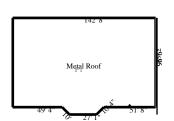
Kitchen 3 Height: 9'

247.40 SF Walls 294.59 SF Walls & Ceiling 5.24 SY Flooring 27.49 LF Ceil. Perimeter 47.18 SF Ceiling 47.18 SF Floor

27.49 LF Floor Perimeter

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
CEILINGS							
70. R&R Suspended ceiling system - 2' x 4'	47.18 SF	4.03	4.72	38.98	233.83	(0.00)	233.83
ELECTRICAL							
71. R&R Fluorescent - acoustic grid fixture - four tube, 2'x 4'	2.00 EA	221.48	9.16	90.42	542.54	(0.00)	542.54
HVAC - ACCESSORIES							
72. R&R Ceiling diffuser - square, lay-in - 24"	1.00 EA	110.07	4.35	22.90	137.32	(0.00)	137.32
Totals: Kitchen 3			18.23	152.30	913.69	0.00	913.69
Total: Interior			1,680.56	13,079.24	78,473.69	0.00	78,473.69



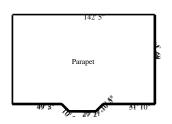


Metal Roof

12974.47 Surface Area 469.77 Total Perimeter Length 129.74 Number of Squares

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
ROOF COVERING							
73. Additional charge for high roof (2 stories or greater)	129.74 SQ	4.10	0.00	106.38	638.31	(0.00)	638.31
74. R&R Metal roofing - High grade	12,974. SF 47	7.91	1,745.71	20,874.74	125,248.50	(0.00)	125,248.50
75. Additional charge for high roof (2 stories or greater)	129.74 SQ	15.15	0.00	393.12	2,358.68	(0.00)	2,358.68
76. R&R Insulation - ISO board, 3"	142.72 SQ	446.59	1,335.40	13,014.56	78,087.28	(0.00)	78,087.28
77. Add for tapered insulation*	142.72 SQ	224.52	623.12	6,533.32	39,199.93	(0.00)	39,199.93
*10% waste added, tapered insulation requ	ired for code co	ompliant roof slope	2				
78. Membrane roofing - cant strips - perlite	469.77 LF	2.95	13.74	279.90	1,679.46	(279.91)	1,399.55
79. R&R Flashing - L flashing - galvanized	469.77 LF	3.71	39.39	356.46	2,138.69	(0.00)	2,138.69
80. R&R Counterflashing - Apron flashing	469.77 LF	8.03	38.47	762.16	4,572.88	(0.00)	4,572.88
81. R&R Eave trim for metal roofing - 26 gauge	469.77 LF	5.42	65.96	522.44	3,134.55	(0.00)	3,134.55
82. R&R Flashing - pipe jack	8.00 EA	54.83	5.99	88.92	533.55	< 0.00>	533.55
DOORS & WINI	OWS						
83. R&R Skylight - single dome fixed, 12. 6 - 15.5 sf	2.00 EA	405.22	36.37	169.36	1,016.17	(0.00)	1,016.17
HVAC - CONDENSER/AIR HAN	DLER REPL	ACEMENT					
84. R&R Central air - condenser unit - 3 ton - 16-21 SEER	4.00 EA	2,715.87	582.14	2,289.12	13,734.74	(0.00)	13,734.74
ELECTRICAL SERVICE -							
85. R&R Meter mast for overhead power - 2" conduit	1.00 EA	571.73	6.97	115.76	694.46	(0.00)	694.46
ELECTRICAL							
86. R&R #10 gauge copper wire - stranded or solid	40.00 LF	1.22	0.78	9.92	59.50	(0.00)	59.50
87. PVC schedule 40 conduit, 2"	40.00 LF	7.00	1.92	56.38	338.30	(0.00)	338.30
88. R&R Disconnect box - 60 amp - non fused	4.00 EA	192.13	4.16	154.54	927.22	(0.00)	927.22
89. Junction box	4.00 EA	113.42	2.38	91.22	547.28	(0.00)	547.28
Totals: Metal Roof			4,502.50	45,818.30	274,909.50	279.91	274,629.59





Parapet Height: 1' 6"

490.07 SF Walls 13431.23 SF Walls & Ceiling 1437.91 SY Flooring

326.71 LF Ceil. Perimeter

12941.17 SF Floor 326.71 LF Floor Perimeter

12941.17 SF Ceiling

Missing Wall 142' 5 1/8" X 1' 6" Opens into Exterior

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
PARAPET							
90. Concrete patch / small repair	47.00 EA	83.85	6.11	789.42	4,736.48	(0.00)	4,736.48
91. Epoxy injection - concrete repair (per LF of crack)	228.00 LF	33.89	24.90	1,550.36	9,302.18	(0.00)	9,302.18
92. Two coat stucco over masonry	261.20 SF	4.29	0.00	224.12	1,344.67	(0.00)	1,344.67
93. Waterproof concrete & masonry paint	1,306.84 SF	1.33	45.02	356.62	2,139.74	(0.00)	2,139.74
Totals: Parapet			76.03	2,920.52	17,523.07	0.00	17,523.07
Total: Roof			4.578.53	48,738.82	292,432.57	279.91	292,152,66

General Conditions

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
94. Temporary Repairs*	1.00 EA	5,515.00	0.00	1,103.00	6,618.00	(0.00)	6,618.00
95. Debris chute mounting hardware - per week	6.00 WK	25.00	0.00	30.00	180.00	(0.00)	180.00
4 each @ 4 weeks							
96. Debris chute - per week - 30" x 4' section	6.00 WK	15.60	0.00	18.72	112.32	(0.00)	112.32
4 each @ 4 weeks							
97. Debris chute hopper - per week - 30" x 4' section	6.00 WK	28.80	0.00	34.56	207.36	(0.00)	207.36
4 each @ 4 weeks							
98. R&R Temporary fencing	538.00 LF	6.86	0.00	738.14	4,428.82	(640.22)	3,788.60
99. Safety Monitor - per hour*	120.00 HR	33.49	0.00	803.76	4,822.56	(803.76)	4,018.80
*Safety monitor for pedestrian and traffic	protection durin	ig normal work ho	ours, 1 month				
100. Scaffold - per section (per month)	1.00 MO	112.88	0.00	22.58	135.46	(22.58)	112.88
*20 sections of scaffolding for 1 month for	pedestrian prot	ection along sidev	valks				
101. R&R Stop/Traffic sign - aluminum - up to 36"	3.00 EA	130.51	18.87	82.10	492.50	(76.71)	415.79
102. Scissor lift - 26' platform height (per week)	3.00 WK	517.50	0.00	310.50	1,863.00	(0.00)	1,863.00
103. Barricade and warning device - setup and takedown	20.00 HR	53.51	0.00	214.04	1,284.24	(214.04)	1,070.20

^{*}Allowance for 2 workers, 20 hours per worker.



CONTINUED - General Conditions

DESCRIPTION	QUANTITY	UNIT PRICE	TAX	O&P	RCV	DEPREC.	ACV
104. Telehandler/forklift (per month) - no operator	1.00 MC	3,063.00	0.00	612.60	3,675.60	(0.00)	3,675.60
105. Warning sign, 4' x 4' on a 6' post (per day)	43.00 DA	2.36	0.00	20.30	121.78	(0.00)	121.78
6 signs for 30 days							
106. Caution tape	1,800.00 LF	0.07	1.17	25.44	152.61	(0.00)	152.61
107. Traffic cones (per unit, per day)	120.00 DA	0.70	0.00	16.80	100.80	(16.80)	84.00
80 cones for 30 days							
108. Electrician - per hour	36.00 HR	98.02	0.00	705.74	4,234.46	(705.74)	3,528.72
*Electrician allowance to assess and repair	r affected electi	rical components.					
109. Job-site moving/storage container - 20' long - per month	1.00 MC	220.00	14.30	46.86	281.16	(46.86)	234.30
110. Temporary toilet (per month)	2.00 MC	147.38	0.00	58.96	353.72	(58.95)	294.77
Addresses (4) Job-Site Toilets for a total of	(1) Months						
111. Temporary construction office - portable (trailer)	2.00 MC	279.08	0.00	111.64	669.80	(111.63)	558.17
112. Cleaning Technician - per hour	80.00 HR	37.15	231.82	594.40	3,798.22	(633.04)	3,165.18
Allowance addresses Progressive Daily Job	Site Clean-Up	and Final Post Con	struction Clear	n-Up			
113. Dumpster load - Approx. 40 yards, 7-8 tons of debris	3.00 EA	842.02	0.00	505.22	3,031.28	(0.00)	3,031.28
114. General Demolition - per hour	120.00 HR	38.77	0.00	930.48	5,582.88	(0.00)	5,582.88
Addresses additional labor necessary to h dumpster.	aul debris to t	rash shoots and la	rger debris d	own building	to ground lev	el and transpor	ting to
115. Commercial Supervision / Project Management - per hour	67.00 HR	59.52	0.00	797.56	4,785.40	(797.57)	3,987.83



CONTINUED - General Conditions

DESCRIPTION QUANTITY UNIT PRICE TAX O&P RCV DEPREC. ACV

CONSTRUCTION MANAGER (PROJECT MANAGER) DUTIES & RESPONSIBILITIES

- 1). Reconstruction planning. Working with architects, engineers, consultants, and government officials on design studies, site development, building systems, building codes and permits, planning and scheduling, cost estimating, and value engineering to insure the best quality project possible for the allotted budget.
- 2) Bidding process. Supervise the bidding process which includes qualifying bidders, holding pre bid conferences, evaluating bids and making recommendations.
- 3). Set-Up and manage site. Insure that the site is functional and efficient. This includes things like traffic flow, parking, deliveries, storage, equipment, communications, safety, trash pick-up, portable toilets and drinking water.
- 4). Administration. Keep track of project cost, time and quality. Keep records to document these things. Example of records are; reports, submittal, shop drawings, change orders, Inspections records, time cards, and payroll records, Cost accounting.
- 5). Planning and Scheduling. Organizing the sequence of events and allotting the time frame to them. Monitor the work to ensure that it is proceeding according to plan and that the prescribed levels of quality, performance and safety are being met. Monitoring is done through observation inspection and testing. If the work does not proceed according to plan, the CM will make changes to bring the project back in line (Subject to contractor/owner approval). In addition to this, the CM will see the contractor documents the materials, processes and labor used to ensure that they conform to the project specifications. The Construction Manager's job is to oversee the entire project from start to finish and to make it run as smoothly as possible and keep the owner informed of the status of the job

XACTWARE DEFINITION OF WHATS INCLUDED AND NOT INCLUDED.

Construction Supervisor (Superintendent) Duties and Responsibilities: (OSHA 1910.1200 Appendix E Item #2 Identify responsible staff) (OSHA 1926.32 definitions (F) Competent person (M) Qualified person (Refer to OSHA regulations)

- 1). Report and coordinate with the general contractor and the Construction manager.
- 2). Coordinate the various sub-contractors work processes and movements around the site.
- 3). Oversee the work of varies tradesman to ensure that is being done to specifications and in a timely manner.
- 4). Work with the sub-contractors to see the materials and equipment for each specialty are delivered and stored on site properly and in time and sequence to be ready as needed.
- 5). Keep track of all persons entering the site. See that they are authorized to be there. If not see that they leave immediately. If they are authorized see that they are safe and accommodated to the extent necessary to complete their function.
- 6). Keep a log of all persons entering and leaving the site, as well as all the equipment and materials delivered to the site.
- 7). The super will normally be the first person on site in the morning. He will open the site, inspect the grounds and equipment before workers arrive. As work crews arrive, he will meet with them and pass along pertinent information as well as assign work areas and tasks to be completed. Periodically the Super will check the work in progress, deal with minor conflicts and problems, and generally keep things going as smooth as possible. Additionally, he will enforce health and safety rules, and provide information, help, and possibly training anyone on site that needs these things for the proper performance of their job. At the end of the day, the super will inspect the grounds and equipment before closing the site for the night.

Totals: General Conditions	266.16	7,783.40	46,931.97	4,127.90	42,804.07
Line Item Totals: BRABOINTERNATIONAL	7,795.66	79,805.16	479,247.07	4,407.81	474,839.26

^{*24} hours per week project supervision through the duration of repairs



Grand Total Areas:

SF Walls	38,378.84	SF Ceiling	67,083.04	SF Walls and Ceiling
SF Floor	4,269.85	SY Flooring	2,683.19	LF Floor Perimeter
SF Long Wall	0.00	SF Short Wall	2,680.39	LF Ceil. Perimeter
Floor Area	39,045.98	Total Area	28,091.33	Interior Wall Area
Exterior Wall Area	1,392.75			
		Walls		
Surface Area	129.74	Number of Squares	0.00	Total Perimeter Length
		1	0.00	rotar rotamotor zongur
Total Ridge Length	0.00	Total Hip Length		
	SF Floor SF Long Wall Floor Area	SF Floor 4,269.85 SF Long Wall 0.00 Floor Area 39,045.98 Exterior Wall Area 1,392.75 Surface Area 129.74	SF Floor SF Long Wall 4,269.85 SY Flooring 0.00 SF Short Wall Floor Area Exterior Wall Area 1,392.75 Exterior Perimeter of Walls Surface Area 129.74 Number of Squares	SF Floor 4,269.85 SY Flooring 2,683.19 SF Long Wall 0.00 SF Short Wall 2,680.39 Floor Area 39,045.98 Total Area 28,091.33 Exterior Wall Area 1,392.75 Exterior Perimeter of Walls Surface Area 129.74 Number of Squares 0.00



Summary for Dwelling

Line Item Total	391,646.25
Material Sales Tax	7,357.89
Cleaning Mtl Tax	4.85
Storage Rental Tax	14.30
Subtotal	399,023.29
Overhead	39,902.58
Profit	39,902.58
Cleaning Sales Tax	418.62
Replacement Cost Value	\$479,247.07
Less Depreciation	(4,407.81)
Actual Cash Value	\$474,839.26
Net Claim	\$474,839.26
Total Recoverable Depreciation	4,407.81
Net Claim if Depreciation is Recovered	\$479,247.07

Tom Irmiter



Recap of Taxes, Overhead and Profit

	Overhead (10%)	Profit (10%)	Material Sales Tax (6.5%)	Cleaning Mtl Tax (6.5%)	Cleaning Sales Tax (6.5%)	Manuf. Home Tax (5%)	Storage Rental Tax (6.5%)	Total Tax (6.5%)
Line Iter	ns							
	39,902.58	39,902.58	7,357.89	4.85	418.62	0.00	14.30	0.00
Total								
	39,902.58	39,902.58	7,357.89	4.85	418.62	0.00	14.30	0.00



Recap by Room

Estimate: BRABOINTERNATIONAL

Area: Exterior		
Exterior	49,934.73	12.75%
Area Subtotal: Exterior	49,934.73	12.75%
Area: Interior	12,127.99	3.10%
Warehouse Office 1	1,149.51	0.29%
Warehouse Office 2	936.97	0.24%
Reception	733.38	0.19%
Main Office	12,922.95	3.30%
President's Office	5,820.97	1.49%
Office 1	3,670.31	0.94%
Office 2	1,710.56	0.44%
Office 3	2,513.08	0.64%
Office 4	2,397.74	0.61%
Office 5	2,902.78	0.74%
Office 6	2,625.45	0.67%
Conference Room	3,981.87	1.02%
Server Room	2,346.22	0.60%
Supply Room	2,120.53	0.54%
Bathroom 1	658.98	0.17%
Bathroom 2	667.36	0.17%
Bathroom 3	695.53	0.18%
Bathroom 4	713.30	0.18%
Bathroom 5	736.76	0.19%
Kitchen 1	717.26	0.18%
Ktichen 2	821.23	0.21%
Kitchen 3	743.16	0.19%
Area Subtotal: Interior	63,713.89	16.27%
Area: Roof		
Metal Roof	224,588.70	57.34%
Parapet	14,526.52	3.71%
Area Subtotal: Roof	239,115.22	61.05%
General Conditions	38,882.41	9.93%
Subtotal of Areas	391,646.25	100.00%
Fotal	391,646.25	100.00%

Forensic Building Science, Inc.

Photo Log - October 14, 2019

CLIENT: Brabo International

PROJECT ADDRESS: 11909 Auburn Rd, Laredo, TX 78405 Exterior Photo Log

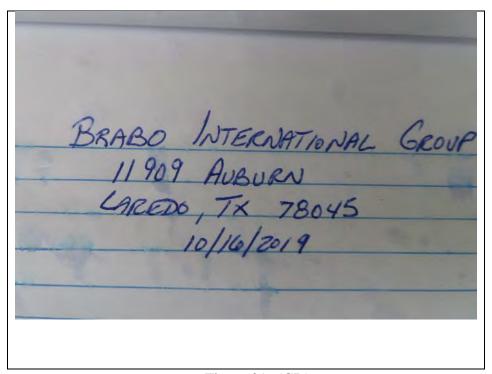


Figure 01. (GD)

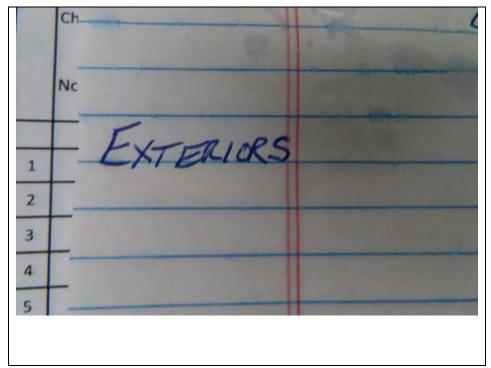


Figure 02. (GD)

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Brabo 002117

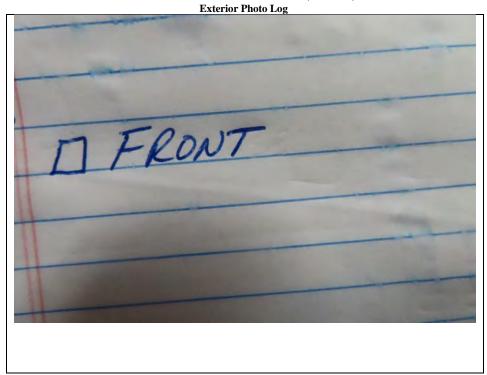


Figure 03. (GD)



Figure 04. (GD)

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Figure 05. (GD)



Figure 06. (GD)

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Figure 07. (GD)



Figure 08. (GD)

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Figure 09. (GD)



Figure 10. (GD)

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Figure 11. (GD)



Figure 12. (GD)

Page 6 of 97 Reviewed: TJI Brabo 002122



Figure 13. (GD)



Figure 14. (GD)

Page **7** of **97** Reviewed: TJI Brabo 002123

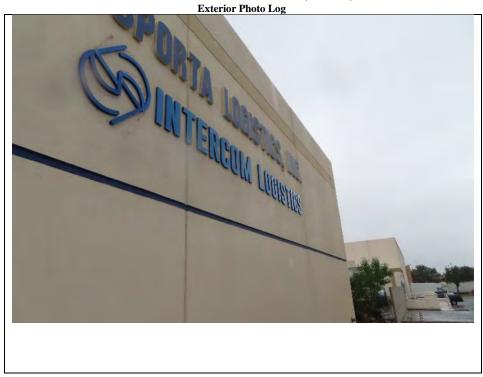


Figure 15. (GD)



Figure 16. (GD)

Page **8** of **97** Reviewed: TJI Brabo 002124



Figure 17. (GD)



Figure 18. (GD)

Reviewed: TJI Page **9** of **97** Brabo 002125



Figure 19. (GD)



Figure 20. (GD)

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Figure 21. (GD)



Figure 22. (GD)

Reviewed: TJI Page **11** of **97** Brabo 002127



Figure 23. (GD)



Figure 24. (GD)

Reviewed: TJI Page 12 of 97 Brabo 002128



Figure 25. (GD)



Figure 26. (GD)

Reviewed: TJI Page 13 of 97 Brabo 002129



Figure 27. (GD)



Figure 28. (GD)

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Figure 29. (GD)



Figure 30. (GD)

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Figure 31. (GD)



Figure 32. (GD)

Page **16** of **97** Reviewed: TJI Brabo 002132

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Figure 33. (GD)



Figure 34. (GD)

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Figure 35. (GD)



Figure 36. (GD)

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Figure 37. (GD)



Figure 38. (GD)

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Figure 39. (GD)



Figure 40. (GD)

Page **20** of **97** Reviewed: TJI Brabo 002136



Figure 41. (GD)



Figure 42. (GD)

Page **21** of **97** Reviewed: TJI Brabo 002137



Figure 43. (GD)

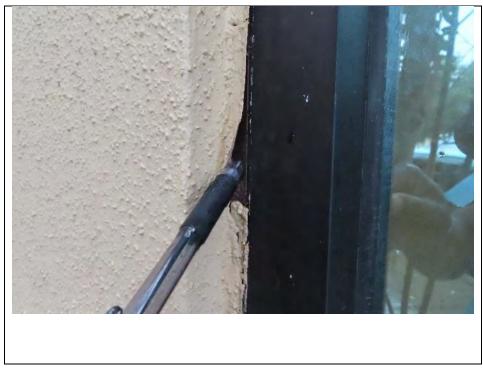


Figure 44. (GD)

Page 22 of 97 Reviewed: TJI Brabo 002138



Figure 45. (GD)



Figure 46. (GD)

Reviewed: TJI Page 23 of 97 Brabo 002139

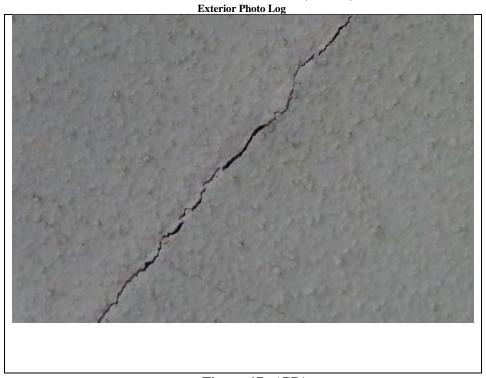


Figure 47. (GD)



Figure 48. (GD)

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Figure 49. (GD)



Figure 50. (GD)

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Figure 51. (GD)



Figure 52. (GD)

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Figure 53. (GD)



Figure 54. (GD)

Page 27 of 97 Reviewed: TJI Brabo 002143



Figure 55. (GD)



Figure 56. (GD)

Page 28 of 97 Reviewed: TJI Brabo 002144

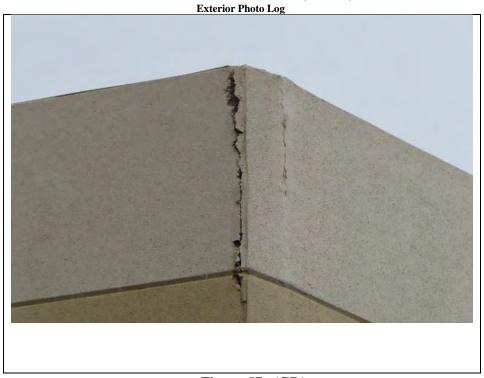


Figure 57. (GD)



Figure 58. (GD)

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Figure 59. (GD)



Figure 60. (GD)

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Figure 61. (GD)



Figure 62. (GD)

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Figure 63. (GD)

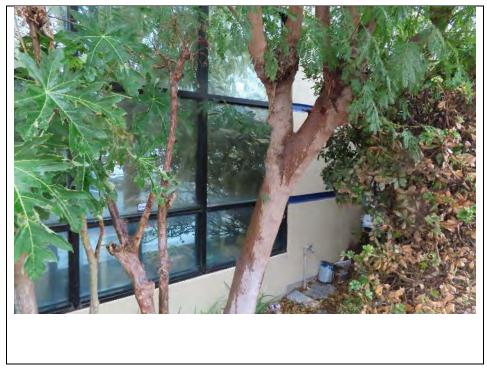


Figure 64. (GD)

Page **32** of **97** Reviewed: TJI Brabo 002148



Figure 65. (GD)



Figure 66. (GD)

Page **33** of **97** Reviewed: TJI Brabo 002149



Figure 67. (GD)



Figure 68. (GD)

Page **34** of **97** Reviewed: TJI Brabo 002150



Figure 69. (GD)



Figure 70. (GD)

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Figure 71. (GD)



Figure 72. (GD)

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Figure 73. (GD)



Figure 74. (GD)

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Figure 75. (GD)



Figure 76. (GD)

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Figure 77. (GD)



Figure 78. (GD)

Page **39** of **97** Reviewed: TJI Brabo 002155



Figure 79. (GD)



Figure 80. (GD)

Page **40** of **97** Reviewed: TJI Brabo 002156

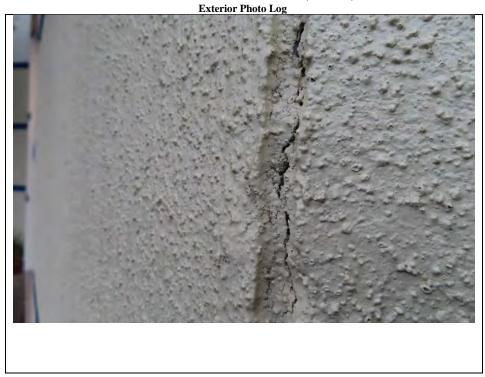


Figure 81. (GD)



Figure 82. (GD)

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Figure 83. (GD)



Figure 84. (GD)

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Figure 85. (GD)



Figure 86. (GD)

Page **43** of **97** Reviewed: TJI Brabo 002159

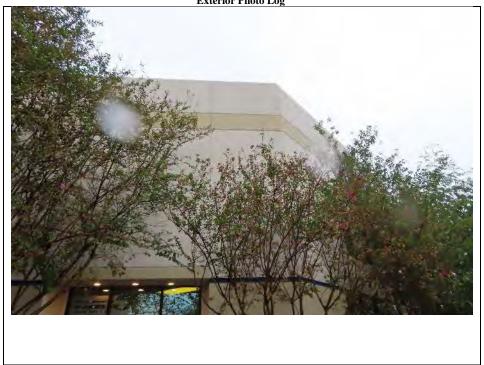


Figure 87. (GD)



Figure 88. (GD)

Page **44** of **97** Reviewed: TJI Brabo 002160

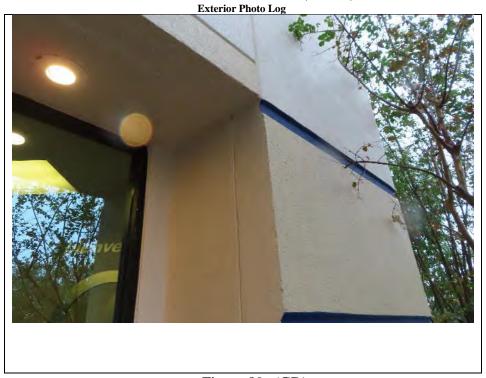


Figure 89. (GD)



Figure 90. (GD)

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Figure 91. (GD)



Figure 92. (GD)

Page **46** of **97** Reviewed: TJI Brabo 002162

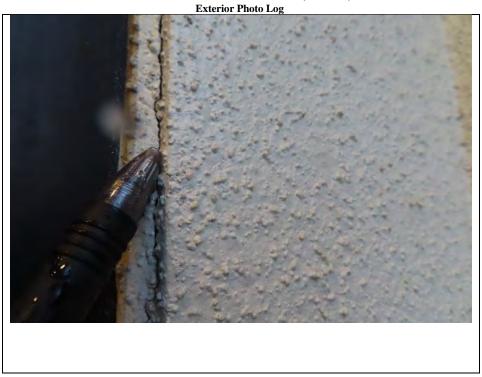


Figure 93. (GD)



Figure 94. (GD)

Page **47** of **97** Reviewed: TJI Brabo 002163



Figure 95. (GD)



Figure 96. (GD)

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Figure 97. (GD)



Figure 98. (GD)

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Figure 99. (GD)



Figure 100. (GD)

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Figure 101. (GD)



Figure 102. (GD)

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Figure 103. (GD)



Figure 104. (GD)

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Figure 105. (GD)



Figure 106. (GD)

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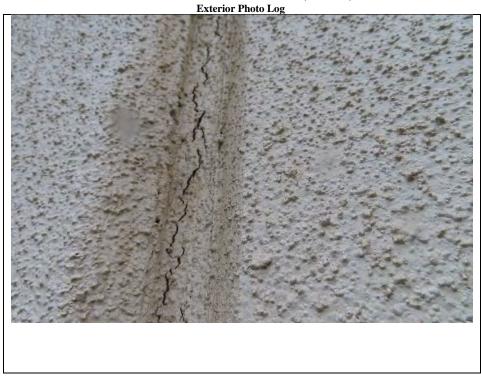


Figure 107. (GD)



Figure 108. (GD)

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Figure 109. (GD)



Figure 110. (GD)

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Figure 111. (GD)



Figure 112. (GD)

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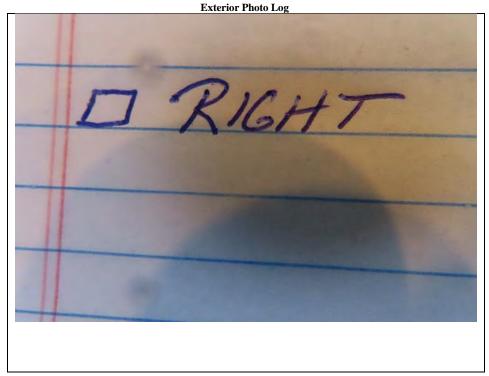


Figure 113. (GD)



Figure 114. (GD)

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Figure 115. (GD)



Figure 116. (GD)

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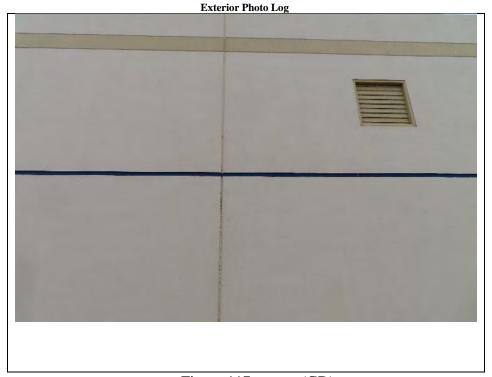


Figure 117. (GD)



Figure 118. (GD)

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Figure 119. (GD)



Figure 120. (GD)

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Figure 121. (GD)



Figure 122. (GD)

Page **61** of **97** Reviewed: TJI Brabo 002177



Figure 123. (GD)



Figure 124. (GD)

Page **62** of **97** Reviewed: TJI Brabo 002178



Figure 125. (GD)



Figure 126. (GD)

Page **63** of **97** Reviewed: TJI Brabo 002179



Figure 127. (GD)



Figure 128. (GD)

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Figure 129. (GD)



Figure 130. (GD)

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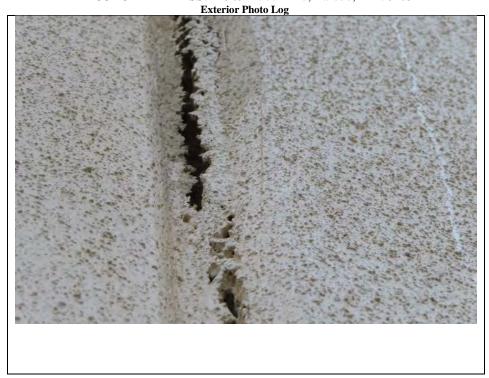


Figure 131. (GD)



Figure 132. (GD)

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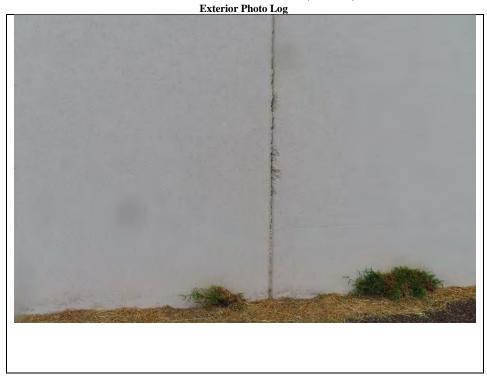


Figure 133. (GD)



Figure 134. (GD)

Page **67** of **97** Reviewed: TJI Brabo 002183



Figure 135. (GD)



Figure 136. (GD)

Page **68** of **97** Reviewed: TJI Brabo 002184



Figure 137. (GD)



Figure 138. (GD)

Page **69** of **97** Reviewed: TJI Brabo 002185



Figure 139. (GD)



Figure 140. (GD)

Page **70** of **97** Reviewed: TJI Brabo 002186



Figure 141. (GD)



Figure 142. (GD)

Page **71** of **97** Reviewed: TJI Brabo 002187



Figure 143. (GD)



Figure 144. (GD)

Page **72** of **97** Reviewed: TJI Brabo 002188



Figure 145. (GD)



Figure 146. (GD)

Page **73** of **97** Reviewed: TJI Brabo 002189



Figure 147. (GD)



Figure 148. (GD)

Page **74** of **97** Reviewed: TJI Brabo 002190



Figure 149. (GD)



Figure 150. (GD)

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Figure 151. (GD)



Figure 152. (GD)

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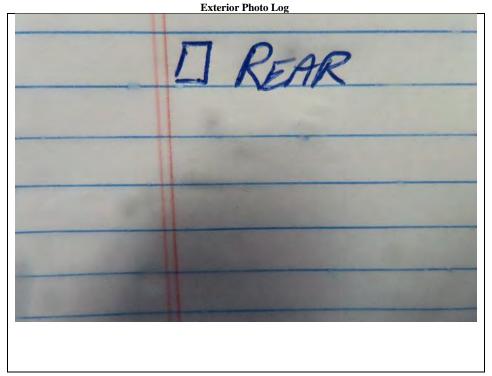


Figure 153. (GD)



Figure 154. (GD)

Page **77** of **97** Reviewed: TJI Brabo 002193



Figure 155. (GD)



Figure 156. (GD)

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Figure 157. (GD)



Figure 158. (GD)

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Figure 159. (GD)



Figure 160. (GD)

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Figure 161. (GD)



Figure 162. (GD)

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Figure 163. (GD)



Figure 164. (GD)

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Figure 165. (GD)

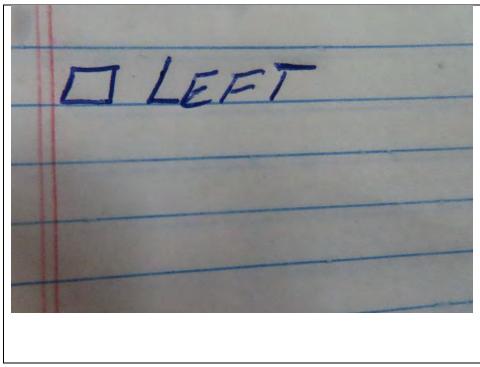


Figure 166. (GD)

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Figure 167. (GD)



Figure 168. (GD)

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Figure 169. (GD)



Figure 170. (GD)

Page **85** of **97** Reviewed: TJI Brabo 002201



Figure 171. (GD)



Figure 172. (GD)

Page **86** of **97** Reviewed: TJI Brabo 002202



Figure 173. (GD)



Figure 174. (GD)

Page **87** of **97** Reviewed: TJI Brabo 002203



Figure 175. (GD)



Figure 176. (GD)

Page **88** of **97** Reviewed: TJI Brabo 002204



Figure 177. (GD)



Figure 178. (GD)

Page **89** of **97** Reviewed: TJI Brabo 002205



Figure 179. (GD)



Figure 180. (GD)

Page **90** of **97** Reviewed: TJI Brabo 002206



Figure 181. (GD)



Figure 182. (GD)

Page **91** of **97** Reviewed: TJI Brabo 002207



Figure 183. (GD)



Figure 184. (GD)

Page **92** of **97** Reviewed: TJI Brabo 002208



Figure 185. (GD)



Figure 186. (GD)

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Figure 187. (GD)



Figure 188. (GD)

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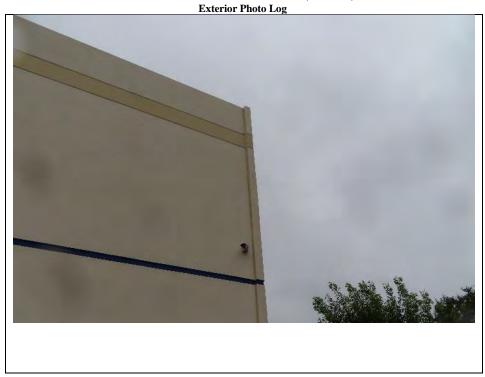


Figure 189. (GD)

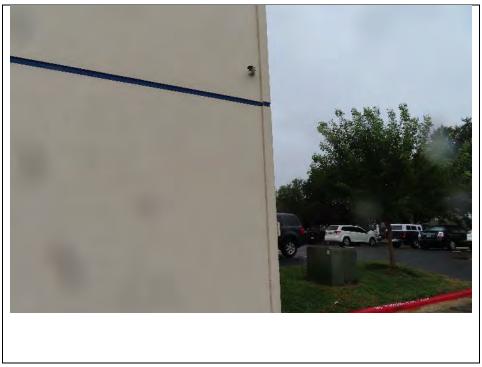


Figure 190. (GD)

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Figure 191. (GD)



Figure 192. (GD)

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Figure 193. (GD)



Figure 194. (GD)

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CLIENT: Brabo International
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Interior Photo Log

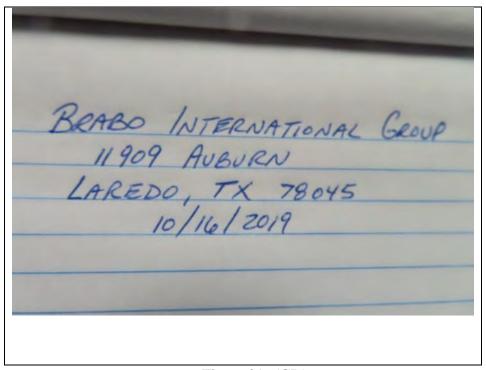


Figure 01. (GD)



Figure 02. (GD)

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Brabo 002214

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Figure 03. (GD)



Figure 04. (GD)

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Figure 05. (GD)

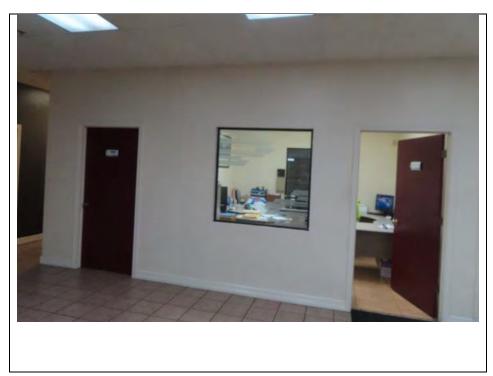


Figure 06. (GD)

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Figure 07. (GD)

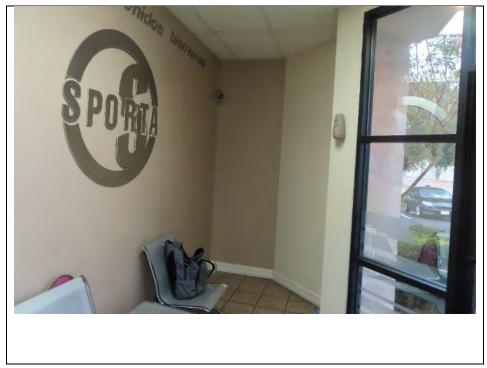


Figure 08. (GD)

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Figure 09. (GD)



Figure 10. (GD)

Page **5** of **30** Reviewed: TJI Brabo 002218

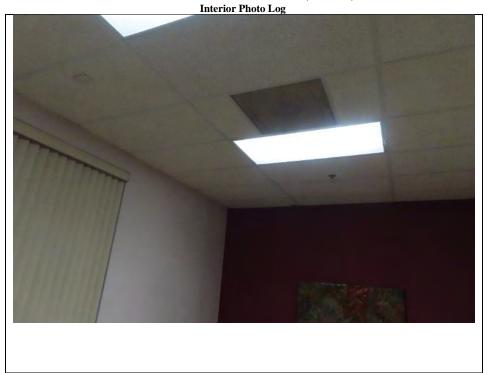


Figure 11. (GD)

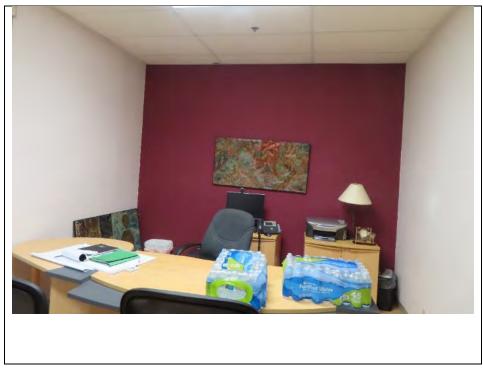


Figure 12. (GD)

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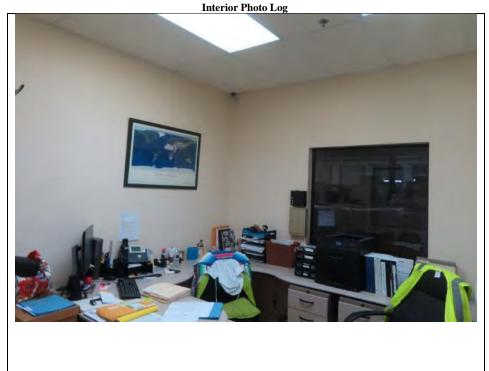


Figure 13. (GD)

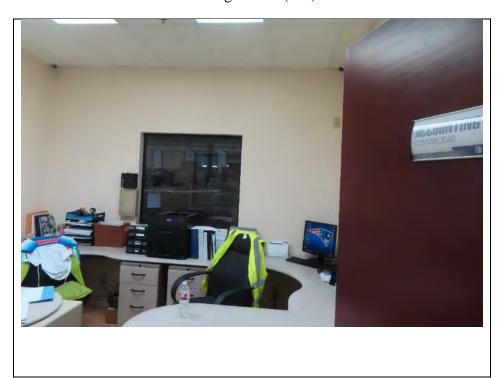


Figure 14. (GD)

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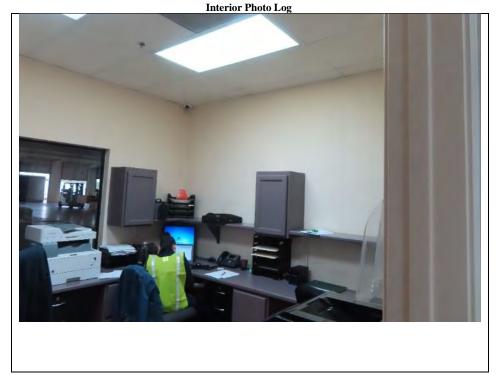


Figure 15. (GD)

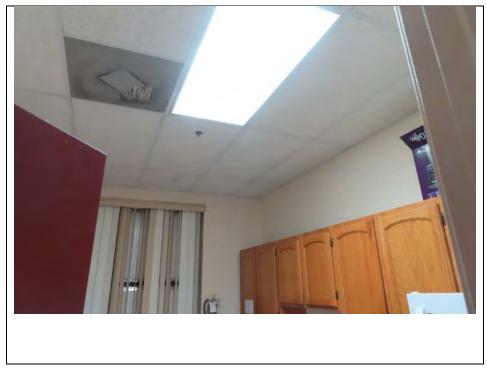


Figure 16. (GD)

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Figure 17. (GD)



Figure 18. (GD)

Page 9 of 30 Reviewed: TJI Brabo 002222



Figure 19. (GD)



Figure 20. (GD)

Page 10 of 30 Reviewed: TJI Brabo 002223

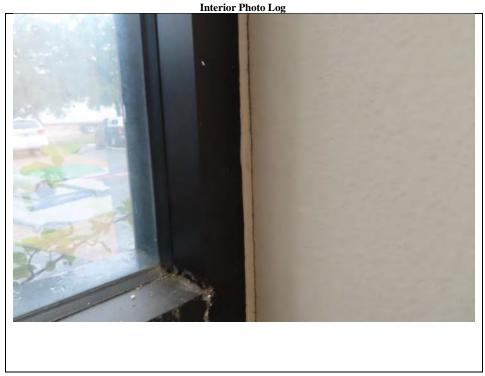


Figure 21. (GD)



Figure 22. (GD)

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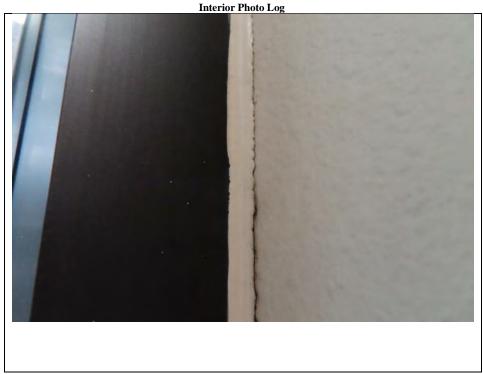


Figure 23. (GD)

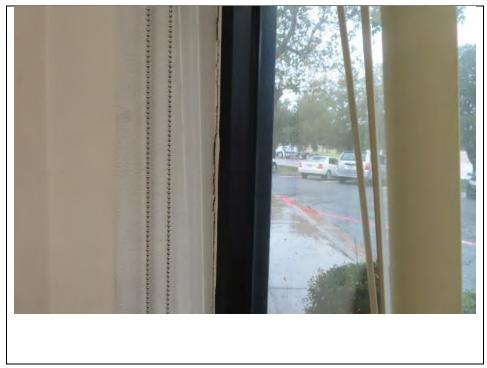


Figure 24. (GD)

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Figure 25. (GD)



Figure 26. (GD)

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Figure 27. (GD)

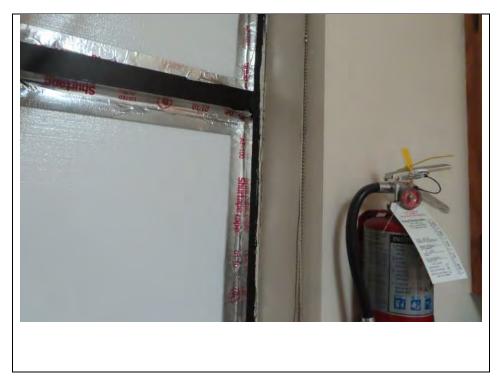


Figure 28. (GD)

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Figure 29. (GD)



Figure 30. (GD)

Page 15 of 30 Reviewed: TJI Brabo 002228



Figure 31. (GD)



Figure 32. (GD)

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Figure 33. (GD)



Figure 34. (GD)

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Figure 35. (GD)



Figure 36. (GD)

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Figure 37. (GD)

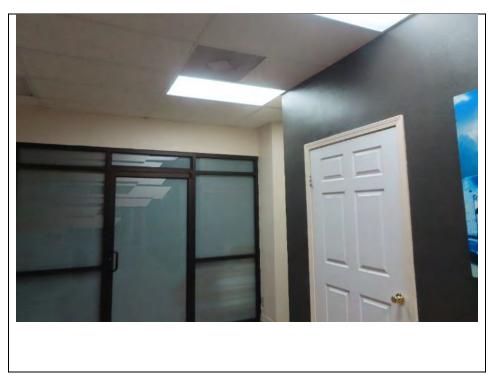


Figure 38. (GD)

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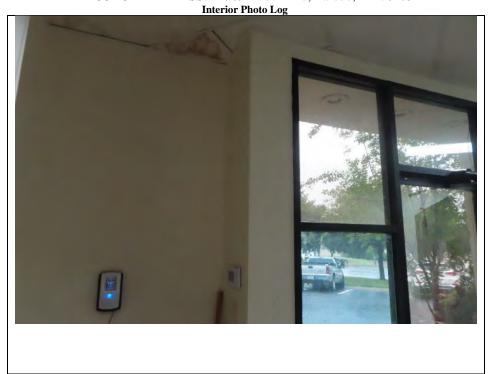


Figure 39. (GD)



Figure 40. (GD)

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Figure 41. (GD)

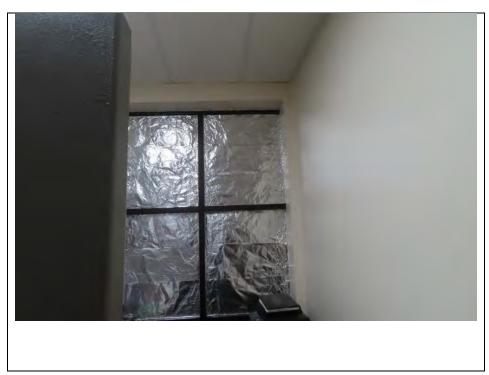


Figure 42. (GD)

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Figure 43. (GD)

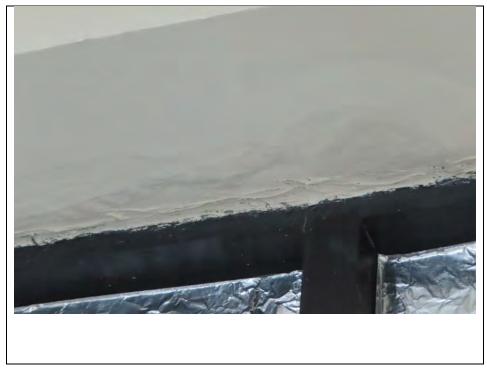


Figure 44. (GD)

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Figure 45. (GD)



Figure 46. (GD)

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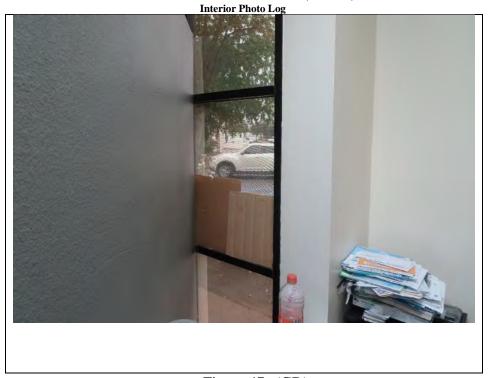


Figure 47. (GD)



Figure 48. (GD)

Page 24 of 30 Reviewed: TJI Brabo 002237



Figure 49. (GD)



Figure 50. (GD)

Page 25 of 30 Reviewed: TJI Brabo 002238

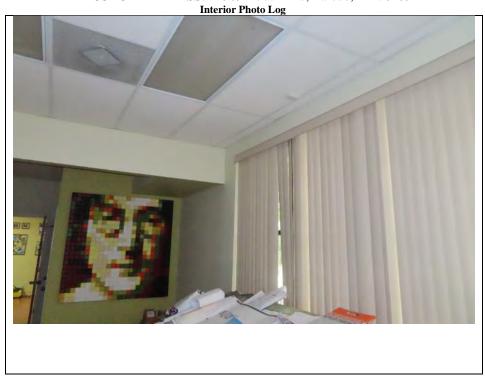


Figure 51. (GD)

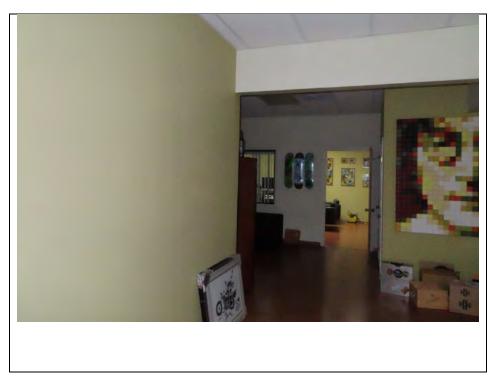


Figure 52. (GD)

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Figure 53. (GD)

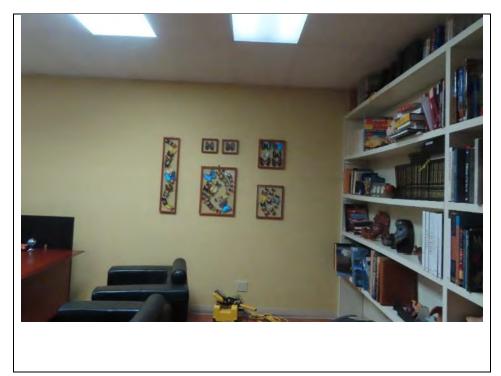


Figure 54. (GD)

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Forensic Building Science, Inc. Photo Log – October 14, 2019 CLIENT: Brabo International

PROJECT ADDRESS: 11909 Auburn Rd, Laredo, TX 78405



Figure 55. (GD)

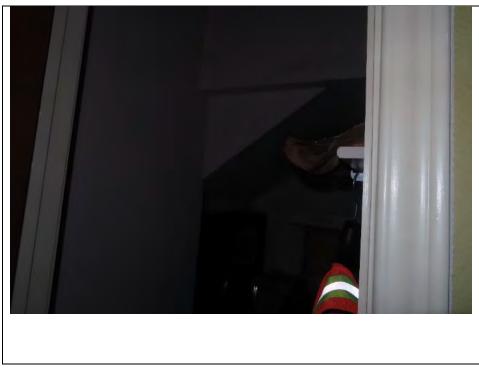


Figure 56. (GD)

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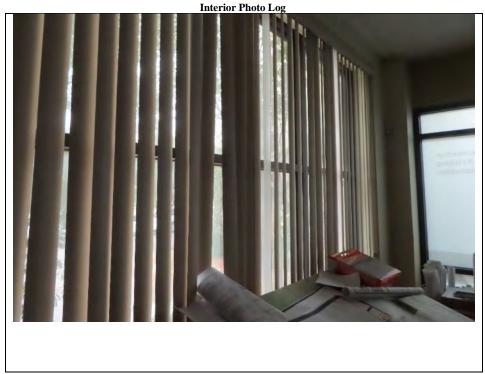


Figure 57. (GD)

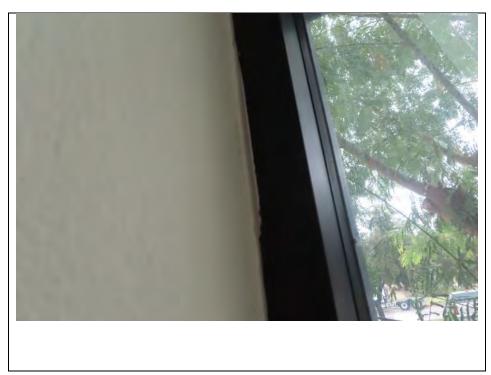


Figure 58. (GD)

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Figure 59. (GD)

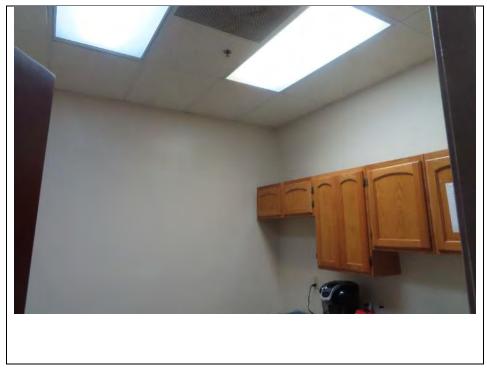


Figure 60. (GD)

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Forensic Building Science, Inc.

Photo Log – October 14, 2019 CLIENT: Brabo International

CLIENT: Brabo International
PROJECT ADDRESS: 11909 Auburn Rd, Laredo, TX 78405
Interior Warehouse Photo Log

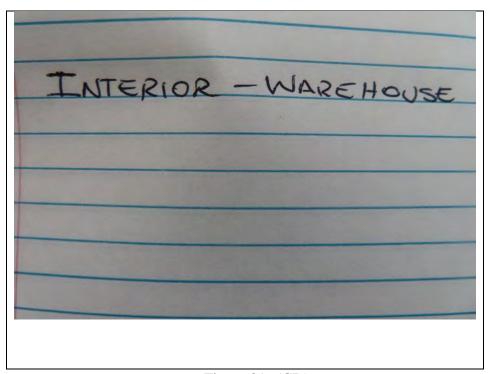


Figure 01. (GD)

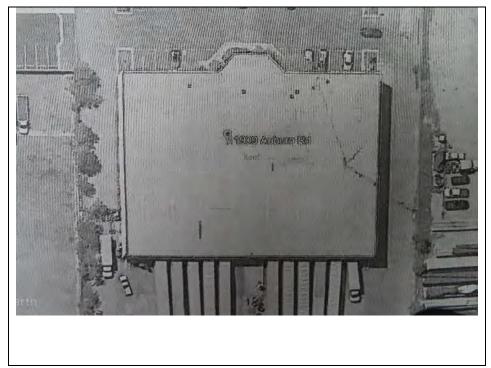


Figure 02. (GD)

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Brabo 002244



Figure 03. (GD)



Figure 04. (GD)

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Figure 05. (GD)

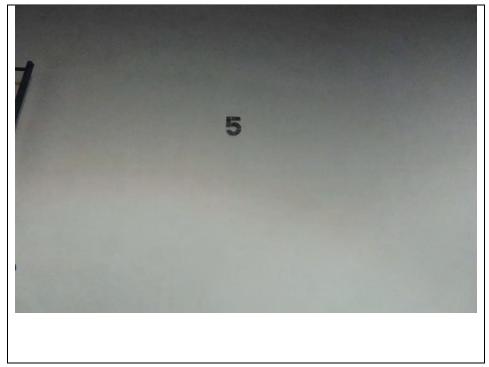


Figure 06. (GD)

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Figure 07. (GD)



Figure 08. (GD)

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Figure 09. (GD)

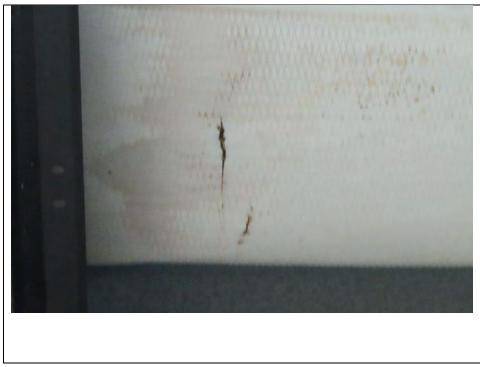


Figure 10. (GD)

Page **5** of **73** Reviewed: TJI Brabo 002248



Figure 11. (GD)



Figure 12. (GD)

Page 6 of **73** Reviewed: TJI Brabo 002249



Figure 13. (GD)



Figure 14. (GD)

Page **7** of **73** Reviewed: TJI Brabo 002250



Figure 15. (GD)



Figure 16. (GD)

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Figure 17. (GD)



Figure 18. (GD)

Page 9 of **73** Reviewed: TJI Brabo 002252



Figure 19. (GD)



Figure 20. (GD)

Page 10 of 73 Reviewed: TJI Brabo 002253



Figure 21. (GD)



Figure 22. (GD)

Page 11 of 73 Reviewed: TJI Brabo 002254



Figure 23. (GD)



Figure 24. (GD)

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Figure 25. (GD)



Figure 26. (GD)

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Figure 27. (GD)



Figure 28. (GD)

Page **14** of **73** Reviewed: TJI Brabo 002257

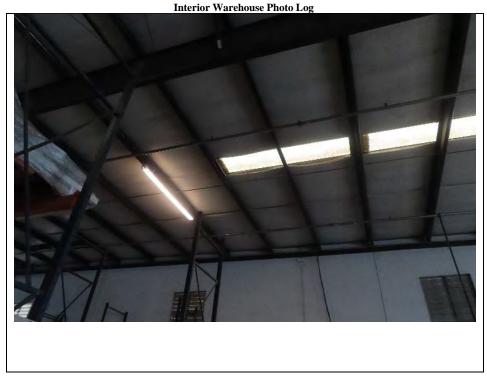


Figure 29. (GD)

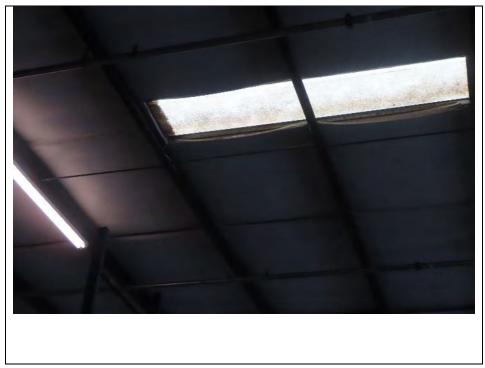


Figure 30. (GD)

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Forensic Building Science, Inc. Photo Log – October 14, 2019 CLIENT: Brabo International

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Figure 31. (GD)



Figure 32. (GD)

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Figure 33. (GD)



Figure 34. (GD)

Page **17** of **73** Reviewed: TJI Brabo 002260



Figure 35. (GD)



Figure 36. (GD)

Page 18 of 73 Reviewed: TJI Brabo 002261



Figure 37. (GD)



Figure 38. (GD)

Page 19 of 73 Reviewed: TJI Brabo 002262



Figure 39. (GD)



Figure 40. (GD)

Page 20 of 73 Reviewed: TJI Brabo 002263



Figure 41. (GD)



Figure 42. (GD)

Page **21** of **73** Reviewed: TJI Brabo 002264

Forensic Building Science, Inc. Photo Log – October 14, 2019 CLIENT: Brabo International

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Interior Warehouse Photo Log

Figure 43. (GD)



Figure 44. (GD)

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Figure 45. (GD)



Figure 46. (GD)

Page 23 of 73 Reviewed: TJI Brabo 002266



Figure 47. (GD)



Figure 48. (GD)

Page **24** of **73** Reviewed: TJI Brabo 002267



Figure 49. (GD)



Figure 50. (GD)

Page **25** of **73** Reviewed: TJI Brabo 002268



Figure 51. (GD)



Figure 52. (GD)

Page **26** of **73** Reviewed: TJI Brabo 002269



Figure 53. (GD)



Figure 54. (GD)

Page 27 of 73 Reviewed: TJI Brabo 002270



Figure 55. (GD)



Figure 56. (GD)

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Figure 57. (GD)



Figure 58. (GD)

Page 29 of 73 Reviewed: TJI Brabo 002272



Figure 59. (GD)



Figure 60. (GD)

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Figure 61. (GD)



Figure 62. (GD)

Page **31** of **73** Reviewed: TJI Brabo 002274



Figure 63. (GD)



Figure 64. (GD)

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Figure 65. (GD)



Figure 66. (GD)

Page **33** of **73** Reviewed: TJI Brabo 002276



Figure 67. (GD)



Figure 68. (GD)

Page **34** of **73** Reviewed: TJI Brabo 002277



Figure 69. (GD)



Figure 70. (GD)

Page **35** of **73** Reviewed: TJI Brabo 002278



Figure 71. (GD)



Figure 72. (GD)

Page **36** of **73** Reviewed: TJI Brabo 002279



Figure 73. (GD)



Figure 74. (GD)

Page **37** of **73** Reviewed: TJI Brabo 002280

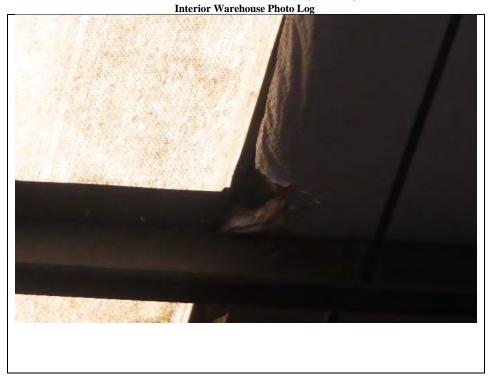


Figure 75. (GD)



Figure 76. (GD)

Page **38** of **73** Reviewed: TJI Brabo 002281



Figure 77. (GD)



Figure 78. (GD)

Page **39** of **73** Reviewed: TJI Brabo 002282



Figure 79. (GD)



Figure 80. (GD)

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Forensic Building Science, Inc. Photo Log – October 14, 2019 CLIENT: Brabo International

PROJECT ADDRESS: 11909 Auburn Rd, Laredo, TX 78405



Figure 81. (GD)



Figure 82. (GD)

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Figure 83. (GD)



Figure 84. (GD)

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Figure 85. (GD)



Figure 86. (GD)

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Forensic Building Science, Inc. Photo Log – October 14, 2019 CLIENT: Brabo International

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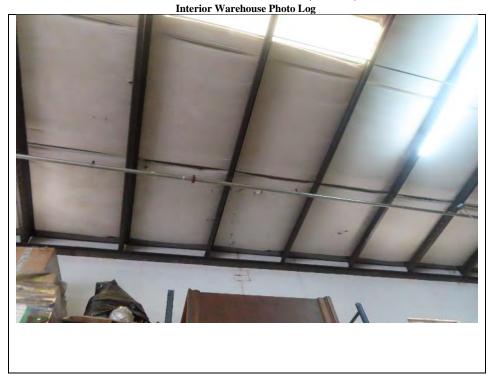


Figure 87. (GD)

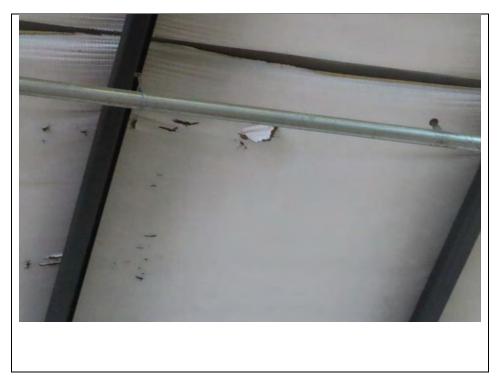


Figure 88. (GD)

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Figure 89. (GD)

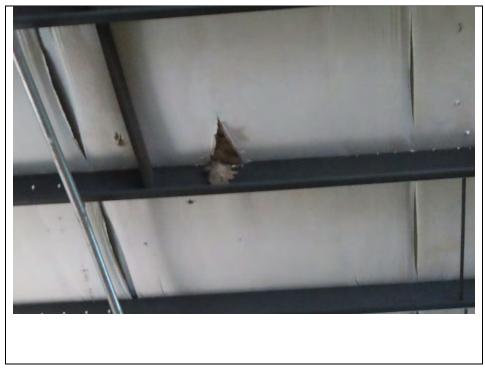


Figure 90. (GD)

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Figure 91. (GD)



Figure 92. (GD)

Page **46** of **73** Reviewed: TJI Brabo 002289

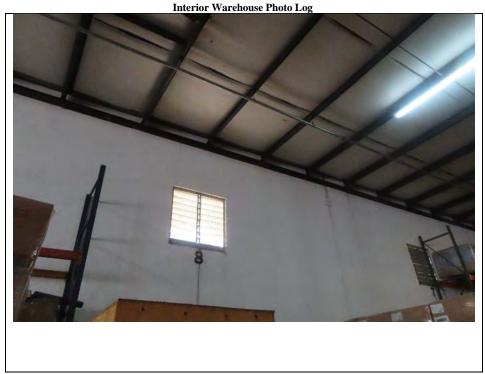


Figure 93. (GD)



Figure 94. (GD)

Page **47** of **73** Reviewed: TJI Brabo 002290



Figure 95. (GD)



Figure 96. (GD)

Page **48** of **73** Reviewed: TJI Brabo 002291



Figure 97. (GD)



Figure 98. (GD)

Page **49** of **73** Reviewed: TJI Brabo 002292



Figure 99. (GD)



Figure 100. (GD)

Page **50** of **73** Reviewed: TJI Brabo 002293

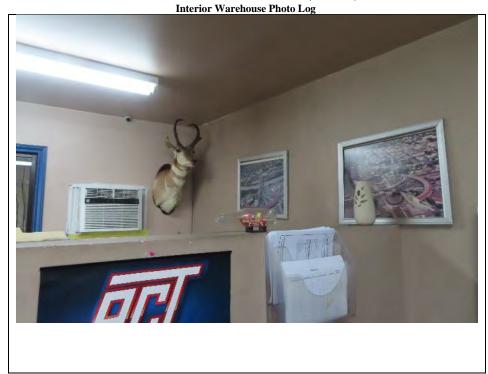


Figure 101. (GD)



Figure 102. (GD)

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Figure 103. (GD)



Figure 104. (GD)

Page **52** of **73** Reviewed: TJI Brabo 002295



Figure 105. (GD)



Figure 106. (GD)

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Figure 107. (GD)



Figure 108. (GD)

Page **54** of **73** Reviewed: TJI Brabo 002297

Interior Warehouse Photo Log



Figure 109. (GD)



Figure 110. (GD)

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Figure 111. (GD)



Figure 112. (GD)

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Figure 113. (GD)



Figure 114. (GD)

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PROJECT ADDRESS: 11909 Auburn Rd, Laredo, TX 78405

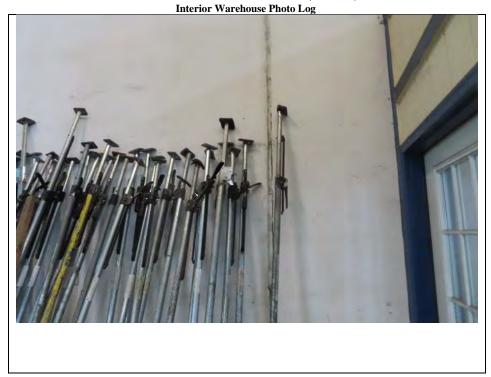


Figure 115. (GD)



Figure 116. (GD)

Page **58** of **73** Reviewed: TJI Brabo 002301



Figure 117. (GD)



Figure 118. (GD)

Page **59** of **73** Reviewed: TJI Brabo 002302



Figure 119. (GD)



Figure 120. (GD)

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Figure 121. (GD)



Figure 122. (GD)

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Forensic Building Science, Inc. Photo Log – October 14, 2019 CLIENT: Brabo International

PROJECT ADDRESS: 11909 Auburn Rd, Laredo, TX 78405



Figure 123. (GD)

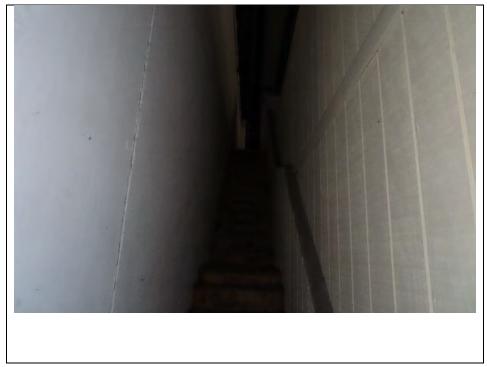


Figure 124. (GD)

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Figure 125. (GD)



Figure 126. (GD)

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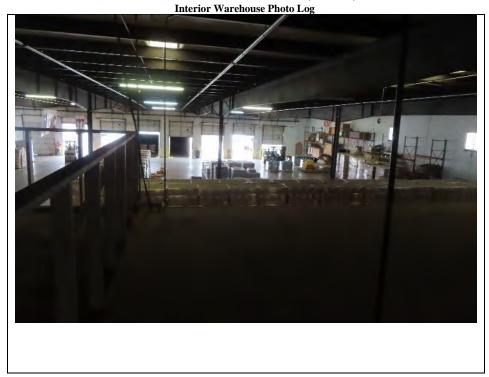


Figure 127. (GD)

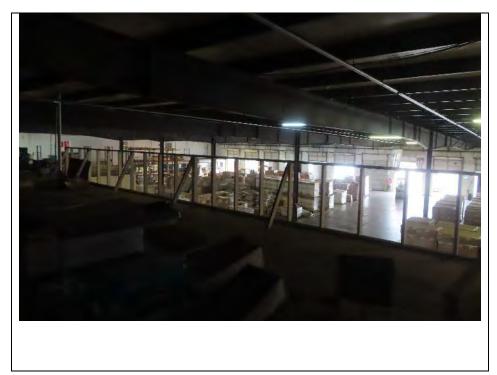


Figure 128. (GD)

Page **64** of **73** Reviewed: TJI Brabo 002307



Figure 129. (GD)



Figure 130. (GD)

Page **65** of **73** Reviewed: TJI Brabo 002308



Figure 131. (GD)



Figure 132. (GD)

Page **66** of **73** Reviewed: TJI Brabo 002309



Figure 133. (GD)



Figure 134. (GD)

Page **67** of **73** Reviewed: TJI Brabo 002310



Figure 135. (GD)



Figure 136. (GD)

Page **68** of **73** Reviewed: TJI Brabo 002311



Figure 137. (GD)

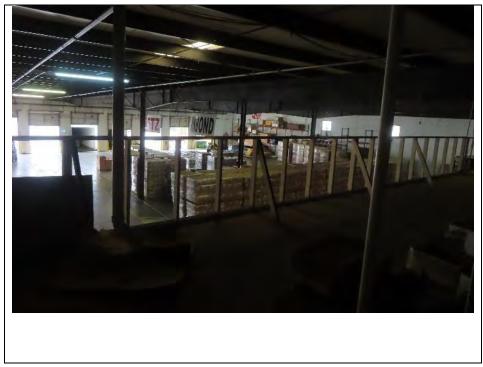


Figure 138. (GD)

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Figure 139. (GD)

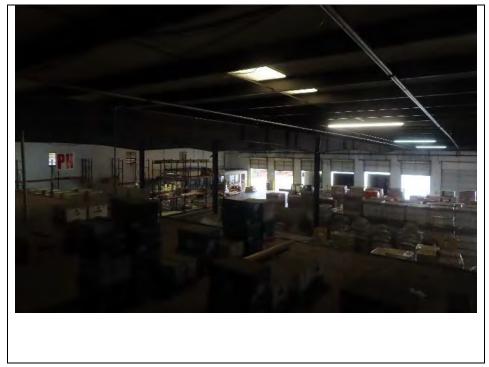


Figure 140. (GD)

Page **70** of **73** Reviewed: TJI Brabo 002313



Figure 141. (GD)



Figure 142. (GD)

Page **71** of **73** Reviewed: TJI Brabo 002314



Figure 143. (GD)



Figure 144. (GD)

Page **72** of **73** Reviewed: TJI Brabo 002315



Figure 145. (GD)



Figure 146. (GD)

Page **73** of **73** Reviewed: TJI Brabo 002316

Forensic Building Science, Inc. Photo Log - PUT DATE HERE

CLIENT: YPROJECT ADDRESS: Z November 13, 2019

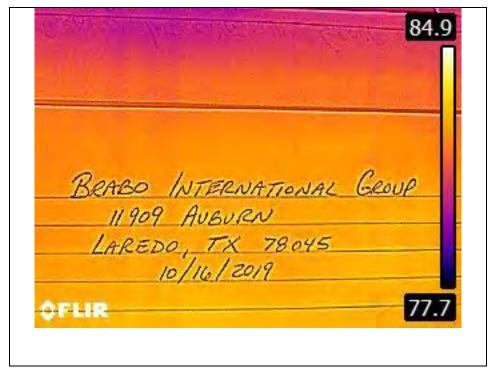


Figure 01. (KJS)

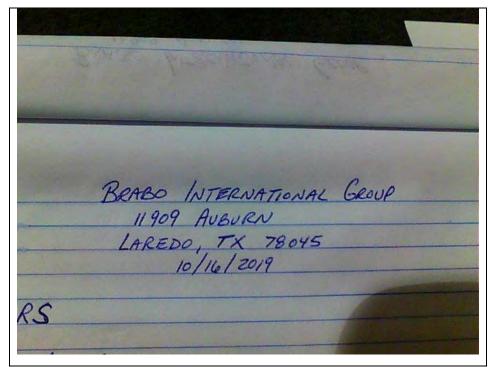


Figure 02. (KJS)

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Brabo 002317



Figure 03. (KJS)



Figure 04. (KJS)

Page 2 of **71** Reviewed: TJI Brabo 002318

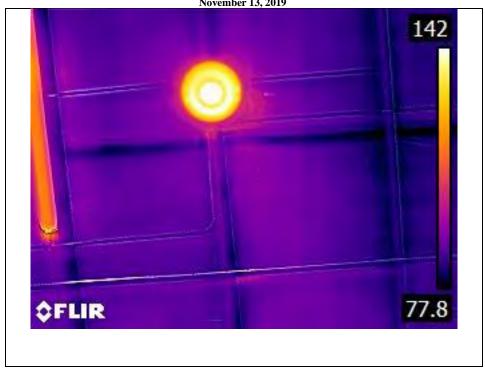


Figure 05. (KJS)



Figure 06. (KJS)

Page 3 of **71** Reviewed: TJI Brabo 002319

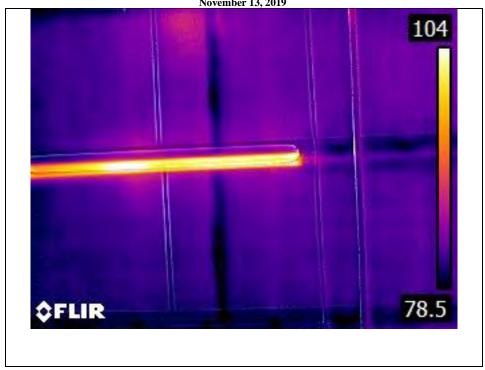


Figure 07. (KJS)



Figure 08. (KJS)

Page 4 of **71** Reviewed: TJI Brabo 002320

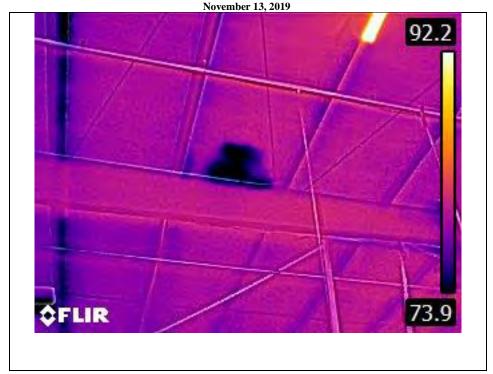


Figure 09. (KJS)



Figure 10. (KJS)

Page **5** of **71** Reviewed: TJI Brabo 002321



Figure 11. (KJS)



Figure 12. (KJS)

Page **6** of **71** Reviewed: TJI Brabo 002322

79.3

Figure 13. (KJS)



Figure 14. (KJS)

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Figure 15. (KJS)



Figure 16. (KJS)

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Figure 17. (KJS)



Figure 18. (KJS)

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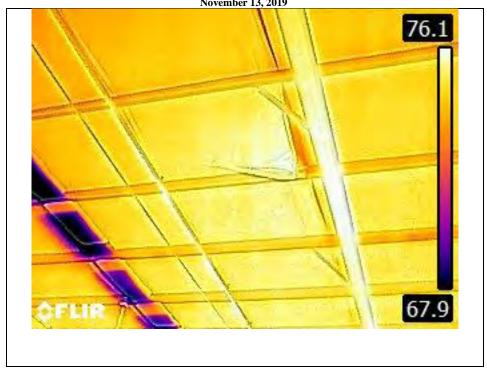


Figure 19. (KJS)



Figure 20. (KJS)

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97.7 **¢FLIR**

Figure 21. (KJS)



Figure 22. (KJS)

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Figure 23. (KJS)



Figure 24. (KJS)

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97.2

Figure 25. (KJS)



Figure 26. (KJS)

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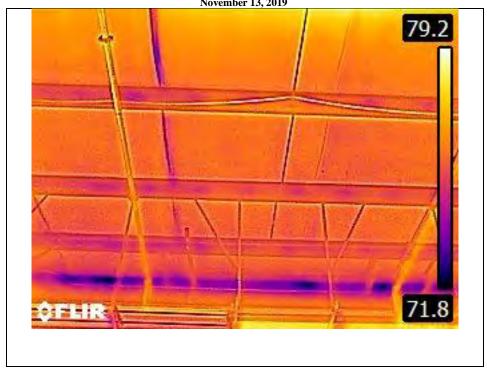


Figure 27. (KJS)



Figure 28. (KJS)

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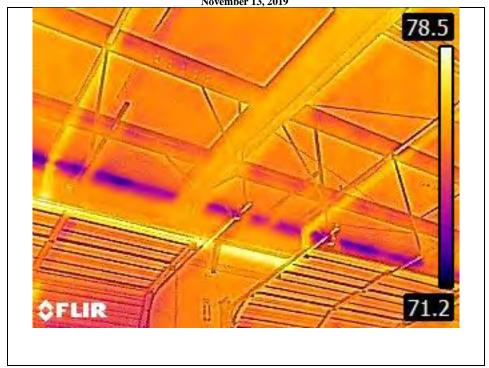


Figure 29. (KJS)



Figure 30. (KJS)

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Figure 31. (KJS)



Figure 32. (KJS)

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Figure 33. (KJS)



Figure 34. (KJS)

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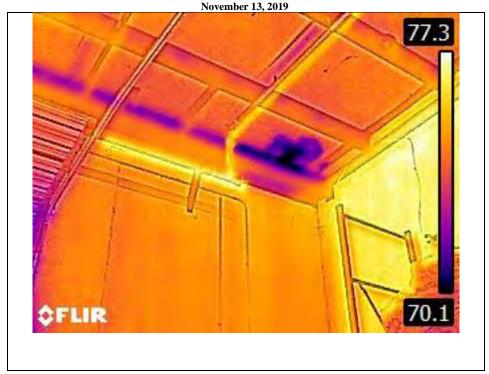


Figure 35. (KJS)



Figure 36. (KJS)

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Figure 37. (KJS)



Figure 38. (KJS)

Page 19 of 71 Reviewed: TJI Brabo 002335

81.0

Figure 39. (KJS)



Figure 40. (KJS)

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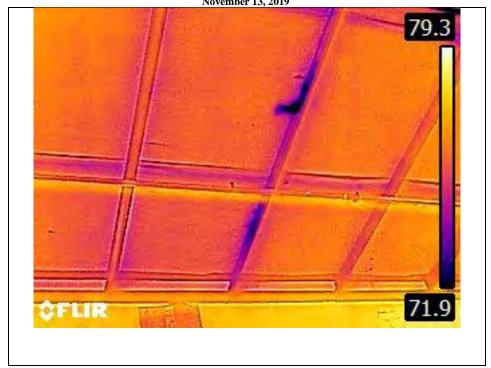


Figure 41. (KJS)



Figure 42. (KJS)

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Figure 43. (KJS)



Figure 44. (KJS)

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79.0

Figure 45. (KJS)



Figure 46. (KJS)

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79.7

Figure 47. (KJS)



Figure 48. (KJS)

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Figure 49. (KJS)



Figure 50. (KJS)

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85.7

Figure 51. (KJS)



Figure 52. (KJS)

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89.4

Figure 53. (KJS)



Figure 54. (KJS)

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80.9 73.6 **\$FLIR**

Figure 55. (KJS)

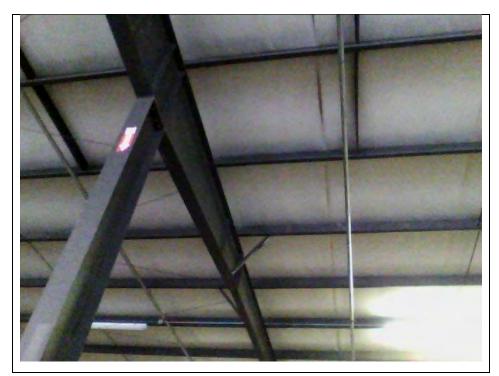


Figure 56. (KJS)

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Figure 57. (KJS)



Figure 58. (KJS)

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82.3

Figure 59. (KJS)



Figure 60. (KJS)

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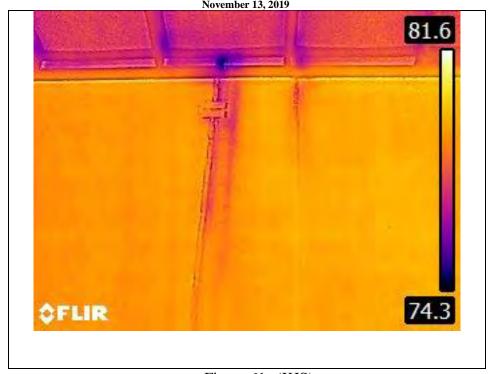


Figure 61. (KJS)



Figure 62. (KJS)

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Figure 63. (KJS)



Figure 64. (KJS)

Page **32** of **71** Reviewed: TJI Brabo 002348

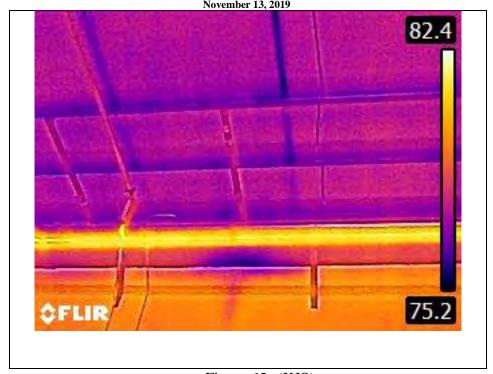


Figure 65. (KJS)

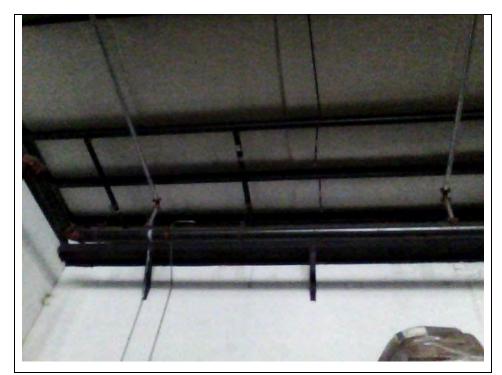


Figure 66. (KJS)

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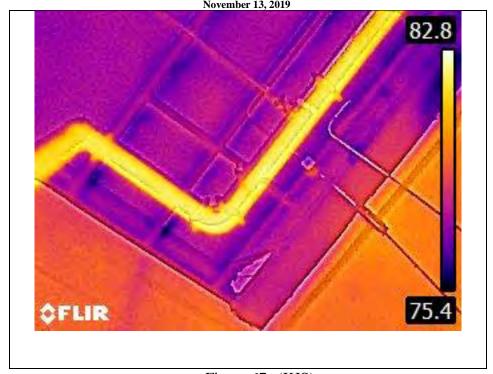


Figure 67. (KJS)



Figure 68. (KJS)

Reviewed: TJI Page **34** of **71** Brabo 002350

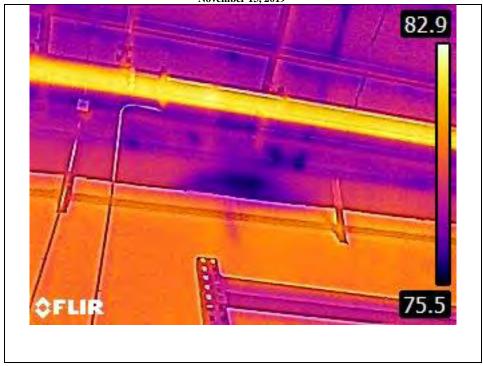


Figure 69. (KJS)



Figure 70. (KJS)

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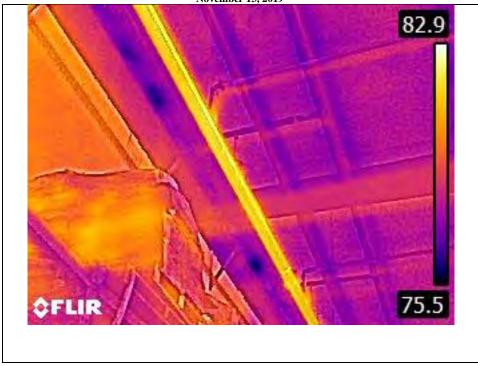


Figure 71. (KJS)



Figure 72. (KJS)

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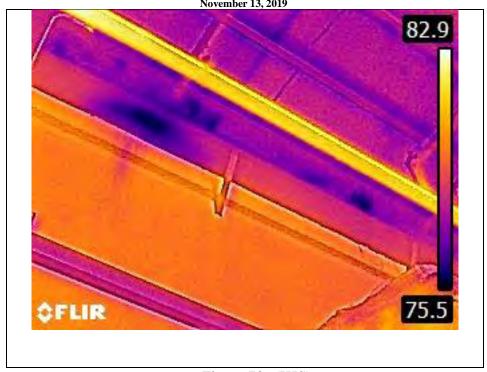


Figure 73. (KJS)



Figure 74. (KJS)

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Figure 75. (KJS)



Figure 76. (KJS)

Page **38** of **71** Reviewed: TJI Brabo 002354



Figure 77. (KJS)



Figure 78. (KJS)

Page **39** of **71** Reviewed: TJI Brabo 002355



Figure 79. (KJS)



Figure 80. (KJS)

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Figure 81. (KJS)



Figure 82. (KJS)

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Figure 83. (KJS)



Figure 84. (KJS)

Page **42** of **71** Reviewed: TJI Brabo 002358

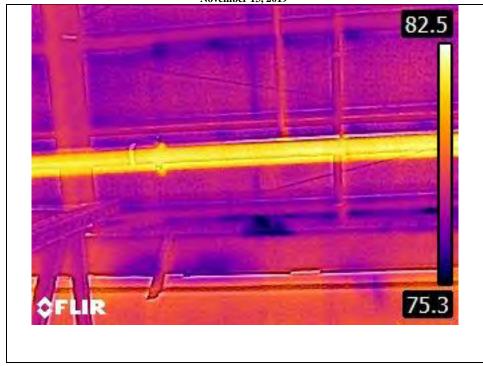


Figure 85. (KJS)

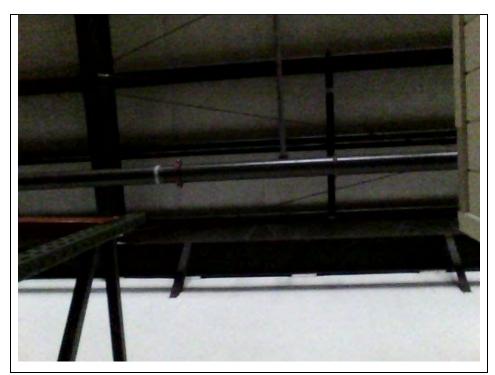


Figure 86. (KJS)

Page **43** of **71** Reviewed: TJI Brabo 002359

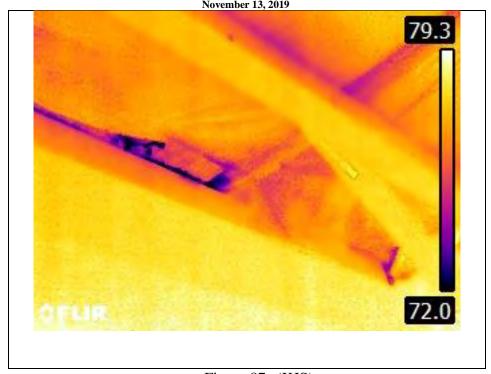


Figure 87. (KJS)



Figure 88. (KJS)

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Figure 89. (KJS)



Figure 90. (KJS)

Reviewed: TJI Page **45** of **71** Brabo 002361

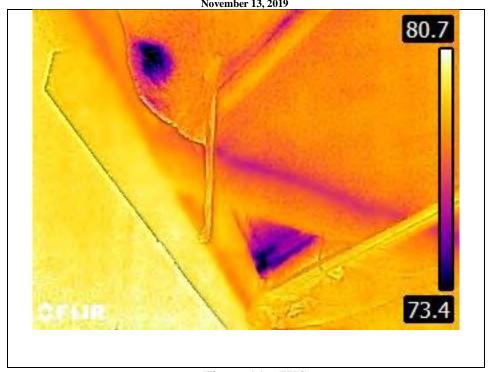


Figure 91. (KJS)

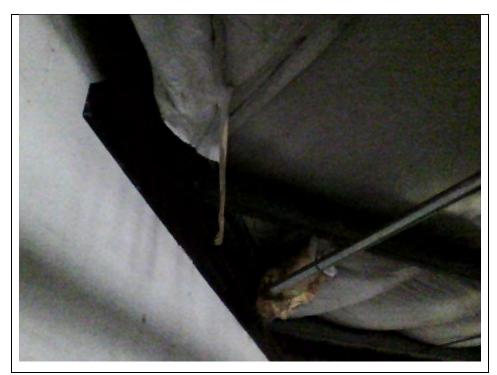


Figure 92. (KJS)

Reviewed: TJI Page **46** of **71** Brabo 002362

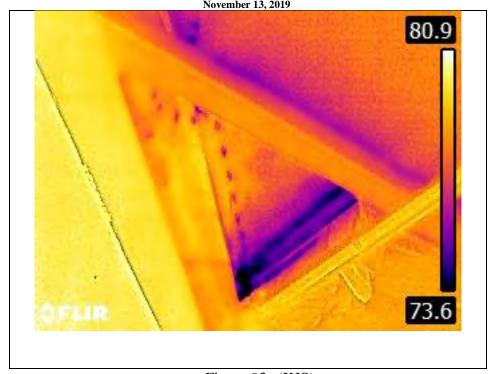


Figure 93. (KJS)



Figure 94. (KJS)

Reviewed: TJI Page **47** of **71** Brabo 002363

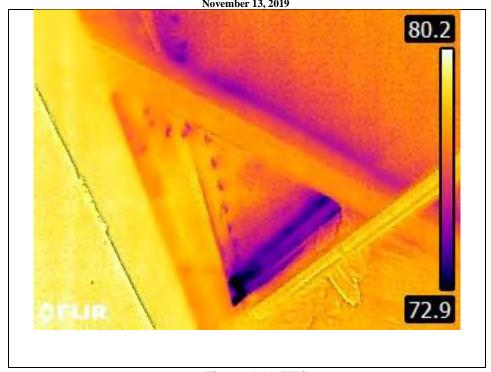


Figure 95. (KJS)



Figure 96. (KJS)

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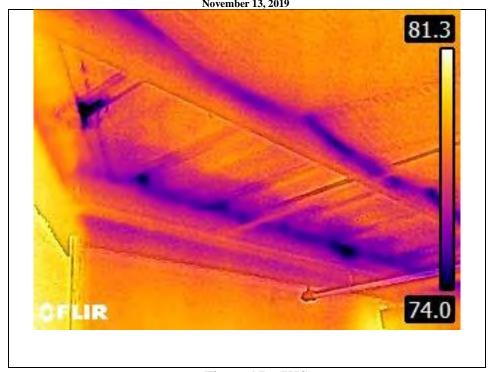


Figure 97. (KJS)



Figure 98. (KJS)

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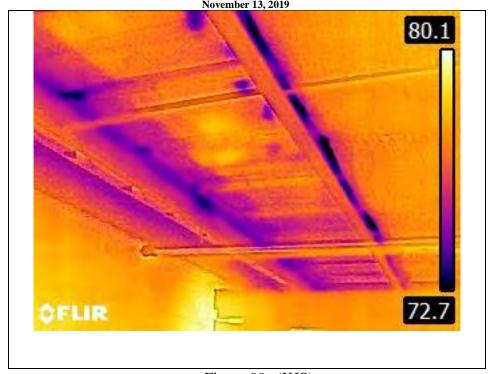


Figure 99. (KJS)



Figure 100. (KJS)

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Figure 101. (KJS)



Figure 102. (KJS)

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Figure 103. (KJS)



Figure 104. (KJS)

Page **52** of **71** Reviewed: TJI Brabo 002368



Figure 105. (KJS)



Figure 106. (KJS)

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Figure 107. (KJS)

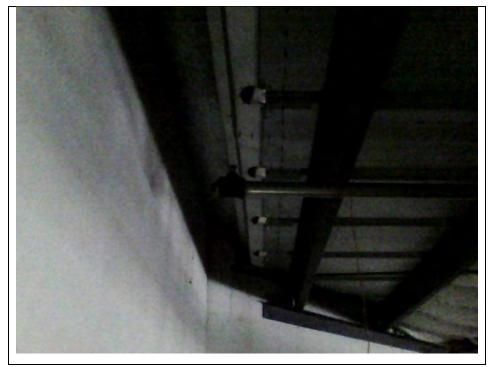


Figure 108. (KJS)

Page **54** of **71** Reviewed: TJI Brabo 002370

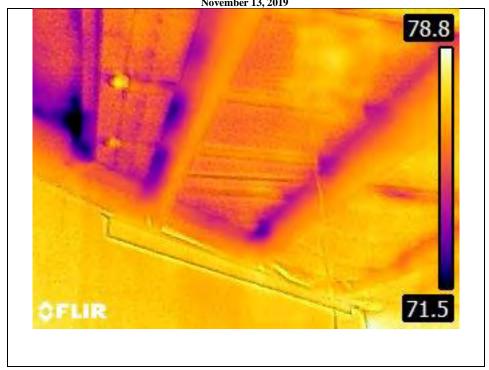


Figure 109. (KJS)



Figure 110. (KJS)

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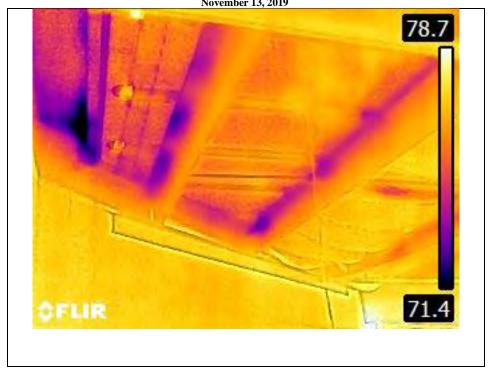


Figure 111. (KJS)



Figure 112. (KJS)

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Figure 113. (KJS)



Figure 114. (KJS)

Reviewed: TJI Page **57** of **71** Brabo 002373

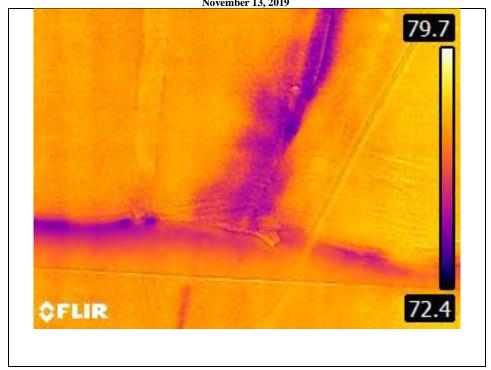


Figure 115. (KJS)

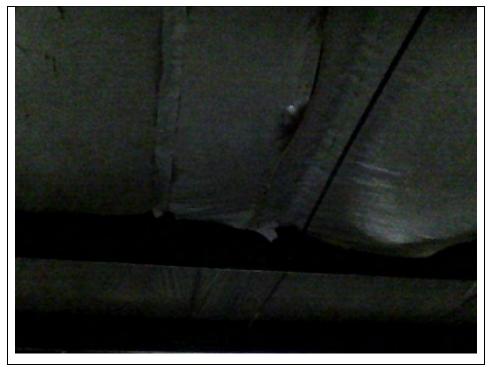


Figure 116. (KJS)

Page **58** of **71** Reviewed: TJI Brabo 002374

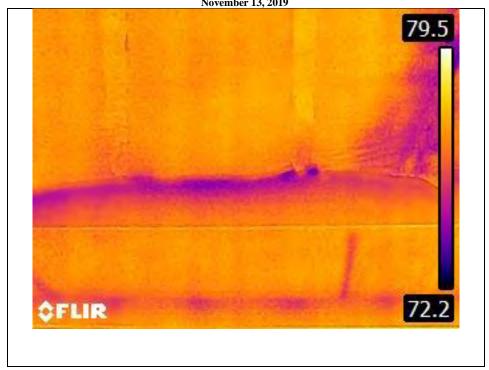


Figure 117. (KJS)



Figure 118. (KJS)

Page **59** of **71** Reviewed: TJI Brabo 002375

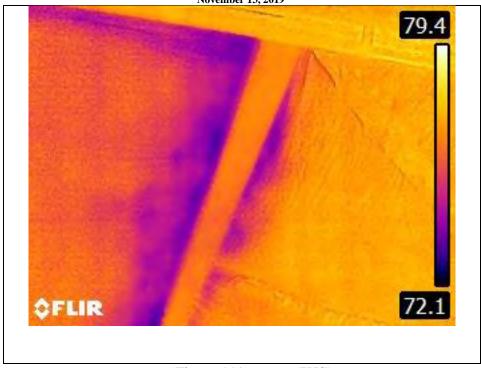


Figure 119. (KJS)



Figure 120. (KJS)

Page **60** of **71** Reviewed: TJI Brabo 002376

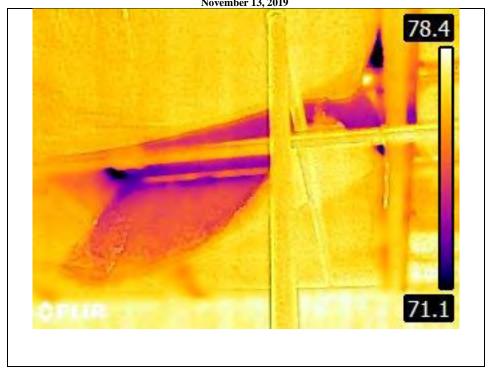


Figure 121. (KJS)



Figure 122. (KJS)

Page **61** of **71** Reviewed: TJI Brabo 002377

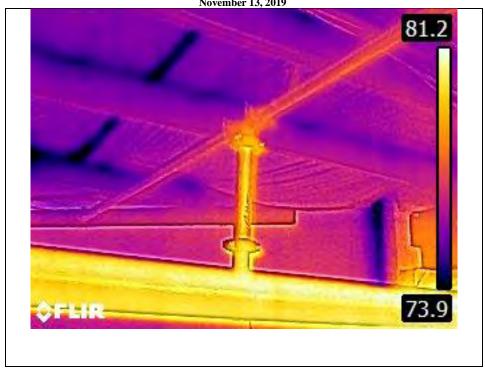


Figure 123. (KJS)



Figure 124. (KJS)

Reviewed: TJI Page **62** of **71** Brabo 002378

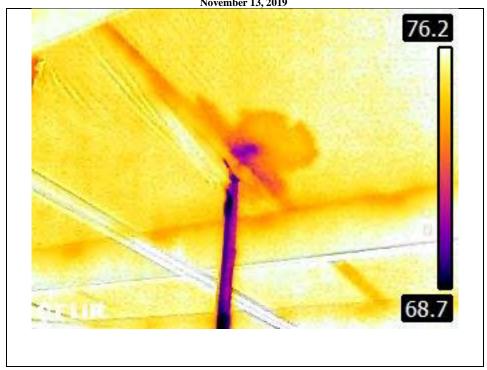


Figure 125. (KJS)



Figure 126. (KJS)

Page **63** of **71** Reviewed: TJI Brabo 002379

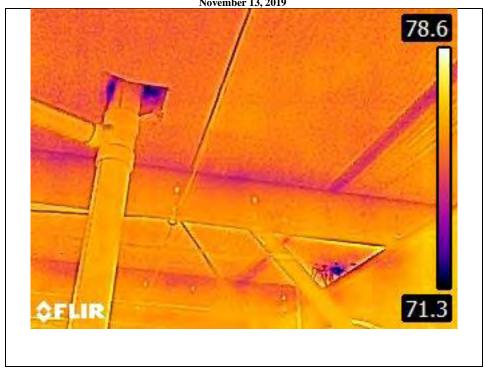


Figure 127. (KJS)



Figure 128. (KJS)

Page **64** of **71** Reviewed: TJI Brabo 002380

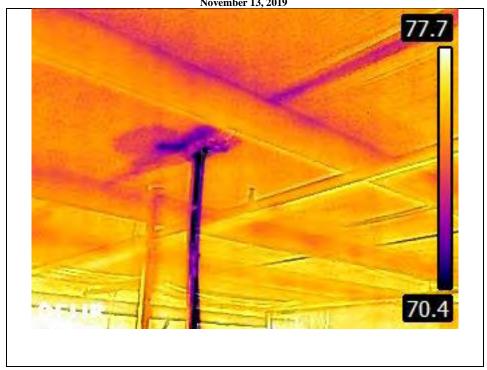


Figure 129. (KJS)



Figure 130. (KJS)

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Figure 131. (KJS)



Figure 132. (KJS)

Page **66** of **71** Reviewed: TJI Brabo 002382

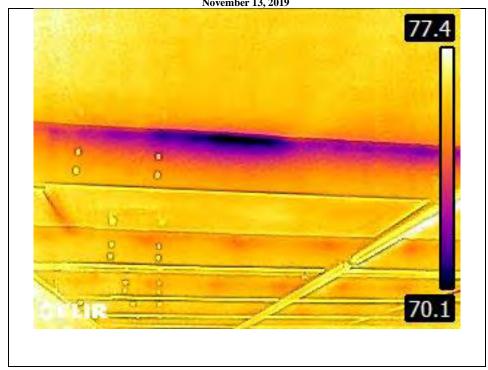


Figure 133. (KJS)



Figure 134. (KJS)

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Figure 135. (KJS)



Figure 136. (KJS)

Page **68** of **71** Reviewed: TJI Brabo 002384



Figure 137. (KJS)



Figure 138. (KJS)

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Figure 139. (KJS)



Figure 140. (KJS)

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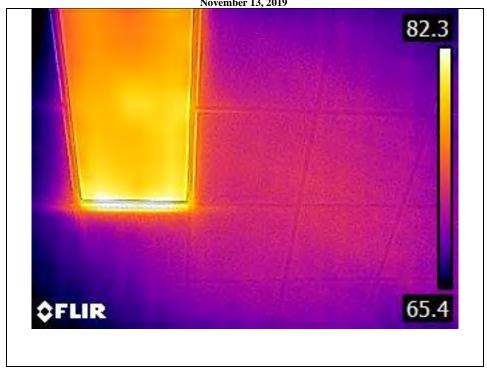


Figure 141. (KJS)



Figure 142. (KJS)

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Forensic Building Science, Inc.

Photo Log - October 14, 2019

CLIENT: Brabo International
PROJECT ADDRESS: 11909 Auburn Rd, Laredo, TX 78405 Roof Photo Log

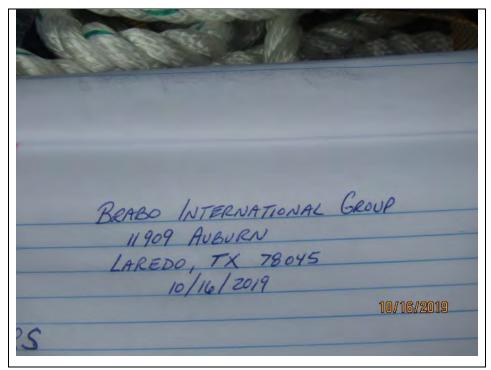


Figure 01. (SRD)

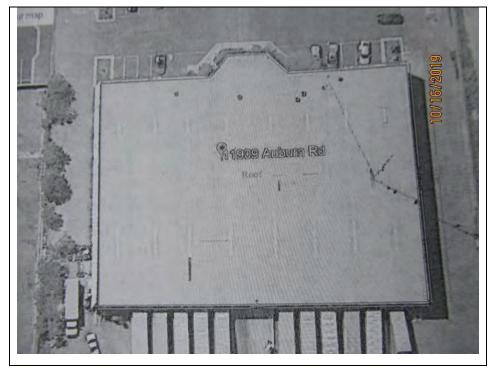


Figure 02. (SRD)

Page **1** of **79** Reviewed: TJI Brabo 002388



Figure 03. (SRD)



Figure 04. (SRD)

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Figure 05. (SRD)



Figure 06. (SRD)

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Figure 07. (SRD)



Figure 08. (SRD)

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Figure 09. (SRD)



Figure 10. (SRD)

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Figure 11. (SRD)



Figure 12. (SRD)

Page **6** of **79** Reviewed: TJI Brabo 002393



Figure 13. (SRD)



Figure 14. (SRD)

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Figure 15. (SRD)



Figure 16. (SRD)

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Figure 17. (SRD)



Figure 18. (SRD)

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Figure 19. (SRD)



Figure 20. (SRD)

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Figure 21. (SRD)



Figure 22. (SRD)

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Figure 23. (SRD)



Figure 24. (SRD)

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Figure 25. (SRD)



Figure 26. (SRD)

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Figure 27. (SRD)



Figure 28. (SRD)

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Figure 29. (SRD)



Figure 30. (SRD)

Page **15** of **79** Reviewed: TJI Brabo 002402



Figure 31. (SRD)



Figure 32. (SRD)

Page **16** of **79** Reviewed: TJI Brabo 002403



Figure 33. (SRD)



Figure 34. (SRD)

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Figure 35. (SRD)



Figure 36. (SRD)

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Figure 37. (SRD)



Figure 38. (SRD)

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Figure 39. (SRD)



Figure 40. (SRD)

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Figure 41. (SRD)



Figure 42. (SRD)

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Figure 43. (SRD)



Figure 44. (SRD)

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Figure 45. (SRD)



Figure 46. (SRD)

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Figure 47. (SRD)



Figure 48. (SRD)

Page **24** of **79** Reviewed: TJI Brabo 002411

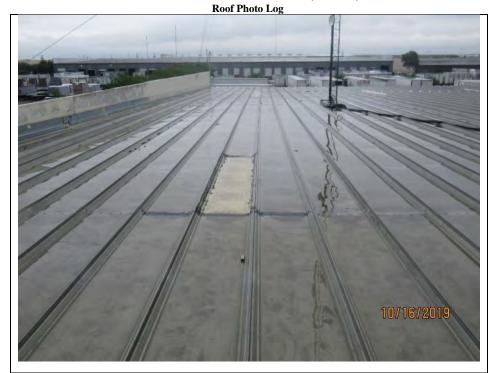


Figure 49. (SRD)



Figure 50. (SRD)

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Figure 51. (SRD)



Figure 52. (SRD)

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Figure 53. (SRD)



Figure 54. (SRD)

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Figure 55. (SRD)



Figure 56. (SRD)

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Figure 57. (SRD)



Figure 58. (SRD)

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Figure 59. (SRD)



Figure 60. (SRD)

Page **30** of **79** Reviewed: TJI Brabo 002417



Figure 61. (SRD)



Figure 62. (SRD)

Page **31** of **79** Reviewed: TJI Brabo 002418



Figure 63. (SRD)



Figure 64. (SRD)

Page **32** of **79** Reviewed: TJI Brabo 002419



Figure 65. (SRD)



Figure 66. (SRD)

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Figure 67. (SRD)



Figure 68. (SRD)

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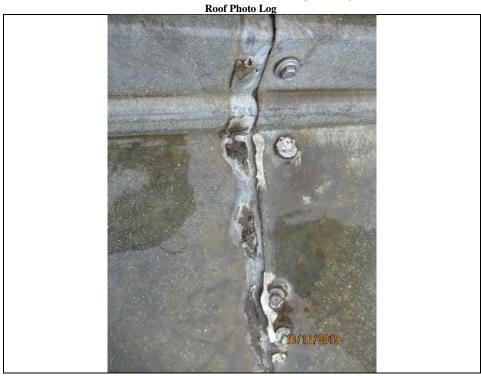


Figure 69. (SRD)



Figure 70. (SRD)

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Figure 71. (SRD)



Figure 72. (SRD)

Page **36** of **79** Reviewed: TJI Brabo 002423



Figure 73. (SRD)



Figure 74. (SRD)

Page **37** of **79** Reviewed: TJI Brabo 002424



Figure 75. (SRD)



Figure 76. (SRD)

Page **38** of **79** Reviewed: TJI Brabo 002425



Figure 77. (SRD)



Figure 78. (SRD)

Page **39** of **79** Reviewed: TJI Brabo 002426



Figure 79. (SRD)



Figure 80. (SRD)

Page **40** of **79** Reviewed: TJI Brabo 002427



Figure 81. (SRD)



Figure 82. (SRD)

Page **41** of **79** Reviewed: TJI Brabo 002428



Figure 83. (SRD)



Figure 84. (SRD)

Page **42** of **79** Reviewed: TJI Brabo 002429



Figure 85. (SRD)



Figure 86. (SRD)

Page **43** of **79** Reviewed: TJI Brabo 002430



Figure 87. (SRD)



Figure 88. (SRD)

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Figure 89. (SRD)

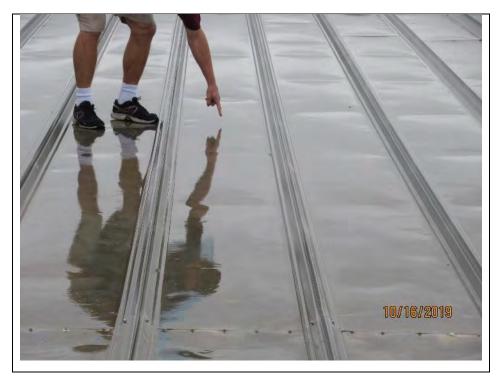


Figure 90. (SRD)

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Figure 91. (SRD)



Figure 92. (SRD)

Page **46** of **79** Reviewed: TJI Brabo 002433



Figure 93. (SRD)



Figure 94. (SRD)

Page **47** of **79** Reviewed: TJI Brabo 002434



Figure 95. (SRD)



Figure 96. (SRD)

Page **48** of **79** Reviewed: TJI Brabo 002435



Figure 97. (SRD)



Figure 98. (SRD)

Page **49** of **79** Reviewed: TJI Brabo 002436



Figure 99. (SRD)



Figure 100. (SRD)

Page **50** of **79** Reviewed: TJI Brabo 002437



Figure 101. (SRD)



Figure 102. (SRD)

Page **51** of **79** Reviewed: TJI Brabo 002438



Figure 103. (SRD)



Figure 104. (SRD)

Page **52** of **79** Reviewed: TJI Brabo 002439



Figure 105. (SRD)



Figure 106. (SRD)

Page **53** of **79** Reviewed: TJI Brabo 002440



Figure 107. (SRD)



Figure 108. (SRD)

Page **54** of **79** Reviewed: TJI Brabo 002441



Figure 109. (SRD)



Figure 110. (SRD)

Page **55** of **79** Reviewed: TJI Brabo 002442



Figure 111. (SRD)



Figure 112. (SRD)

Page **56** of **79** Reviewed: TJI Brabo 002443



Figure 113. (SRD)



Figure 114. (SRD)

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Figure 115. (SRD)



Figure 116. (SRD)

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Figure 117. (SRD)



Figure 118. (SRD)

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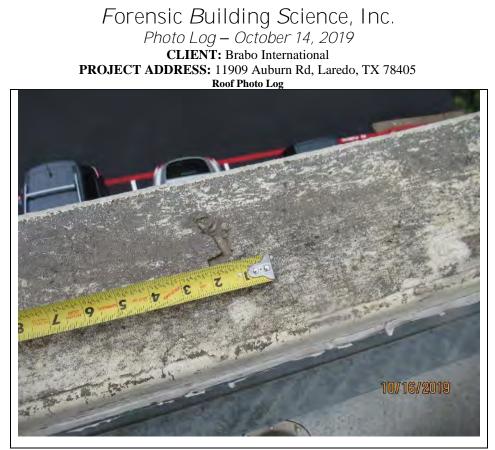


Figure 119. (SRD)



Figure 120. (SRD)

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Figure 121. (SRD)



Figure 122. (SRD)

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Figure 123. (SRD)



Figure 124. (SRD)

Page **62** of **79** Reviewed: TJI Brabo 002449



Figure 125. (SRD)



Figure 126. (SRD)

Page **63** of **79** Reviewed: TJI Brabo 002450



Figure 127. (SRD)



Figure 128. (SRD)

Page **64** of **79** Reviewed: TJI Brabo 002451



Figure 129. (SRD)



Figure 130. (SRD)

Page **65** of **79** Reviewed: TJI Brabo 002452



Figure 131. (SRD)



Figure 132. (SRD)

Page **66** of **79** Reviewed: TJI Brabo 002453



Figure 133. (SRD)



Figure 134. (SRD)

Page **67** of **79** Reviewed: TJI Brabo 002454



Figure 135. (SRD)



Figure 136. (SRD)

Page **68** of **79** Reviewed: TJI Brabo 002455



Figure 137. (SRD)



Figure 138. (SRD)

Page **69** of **79** Reviewed: TJI Brabo 002456



Figure 139. (SRD)



Figure 140. (SRD)

Page **70** of **79** Reviewed: TJI Brabo 002457



Figure 141. (SRD)



Figure 142. (SRD)

Page **71** of **79** Reviewed: TJI Brabo 002458



Figure 143. (SRD)



Figure 144. (SRD)

Page **72** of **79** Reviewed: TJI Brabo 002459



Figure 145. (SRD)

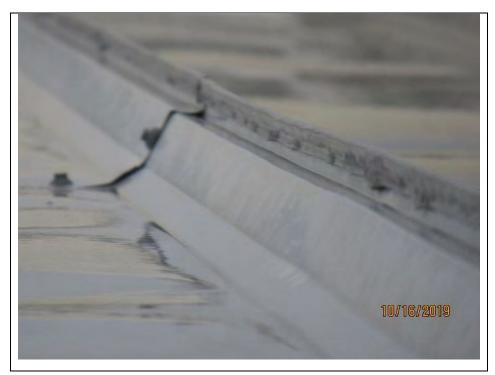


Figure 146. (SRD)

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Figure 147. (SRD)



Figure 148. (SRD)

Page **74** of **79** Reviewed: TJI Brabo 002461



Figure 149. (SRD)



Figure 150. (SRD)

Page **75** of **79** Reviewed: TJI Brabo 002462



Figure 151. (SRD)



Figure 152. (SRD)

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Figure 153. (SRD)



Figure 154. (SRD)

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Figure 155. (SRD)



Figure 156. (SRD)

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Figure 157. (SRD)



Figure 158. (SRD)

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